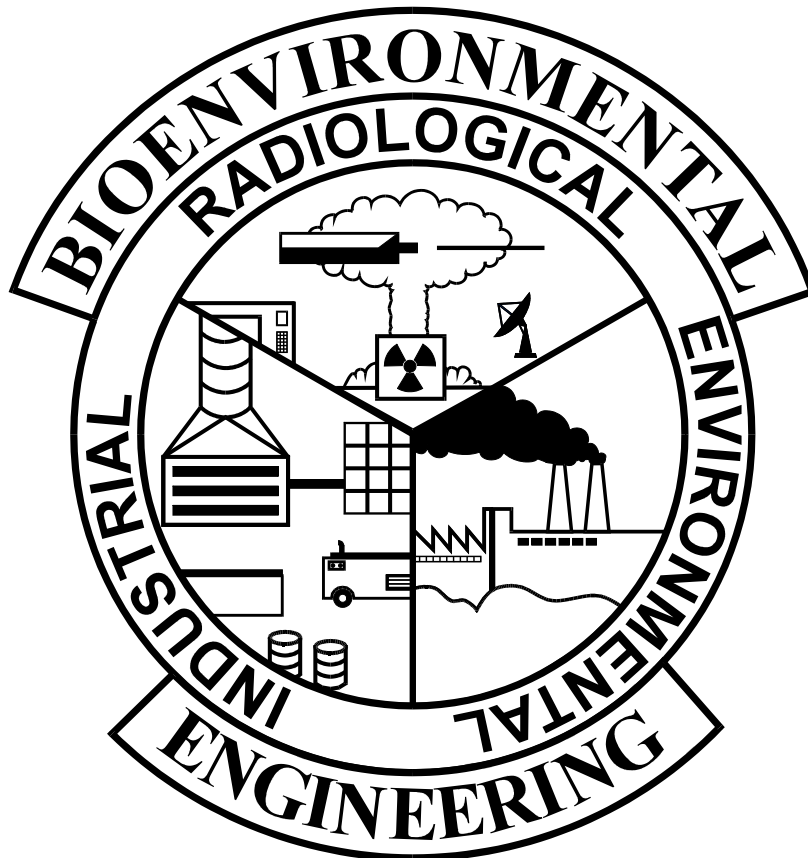


AIR FORCE SPECIALTY CODE 4B0X1 BIOENVIRONMENTAL ENGINEERING



CAREER FIELD EDUCATION AND TRAINING PLAN

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BIOENVIRONMENTAL ENGINEERING (BE) SPECIALTY

AFSC 4B0X1

CAREER FIELD EDUCATION AND TRAINING PLAN (CFETP)

Part I

Preface

1. The ever-changing Air and Space Expeditionary Force (AEF) environment requires vision, preparation, and attention to ensure people have the right skills and tools to deliver the capabilities and the support required by the war fighter in meeting the Air Force (AF) mission of today and vision of the future. Declining resources, expanding mission diversity, and new technologies in the AF are impacting the readiness of our most valuable resource--people. These factors will continue to exist in the future, making it essential for the workforce to be effectively and efficiently trained to perform duties within each skill level of an Air Force Specialty (AFS). To meet the challenges of tomorrow, the AF must place a greater emphasis on career field training today.

2. The BE CFETP is a comprehensive core training document that identifies life-cycle training and education requirements, support resources, and minimum core task requirements for the 4B0X1 specialty. The plan is a "training road map" for the career field, providing personnel with a clear career path to success and makes career field training identifiable, measureable and budget defensible. The CFETP provides personnel with a defined career path and instills rigor in all aspects of career field training. It consists of two parts; supervisors use both parts to plan, manage, and control 4B0X1 training. **NOTE:** Civilians occupying BE positions may use Part II to support duty position qualification training.

2.1. Part I provides information necessary for overall specialty management.

2.1.1. Section A explains how everyone will use this plan.

2.1.2. Section B identifies career field progression information, duties and responsibilities, training strategies, and defines the career field path.

2.1.3. Section C associates each skill level with specialty qualifications (knowledge, education, training, experience).

2.1.4. Section D identifies resource constraints and impacts.

2.1.5. Section E identifies transitional training for Staff Sergeant (SSgt) through Master Sergeant (MSgt).

2.2. Part II provides a comprehensive list of training courses and standards available to support career field training requirements. There are six sections to Part II: Specialty Training Standard (STS), Course Objectives List (COL), On-The-Job (OJT) Support Material, Training Course Index and Civilian Certifications, MAJCOM-Unique Requirements, and Documentation of Training (Air Force Medical Service (AFMS)-specific section).

2.2.1. Section A contains the most current version of the STS. The revised STS identifies 3-, 5- and 7-skill level training requirements and indicates tasks determined as "core" tasks. The STS also includes duties, tasks, technical references (TRs), the USAF School of Aerospace Medicine (USAFSAM)-conducted training, wartime emergency "surge" training curriculum, and correspondence course requirements.

2.2.2. Section B contains the COL. Supervisors use this list to determine the scope of training Airmen receive from these courses.

2.2.3. Section C identifies available OJT support materials, e.g. AF Qualification Training Packages (QTPs), which are developed to support proficiency training.

2.2.4. Section D contains the training course index, list of mandatory courses, field training, and a variety of Advanced Distributed Learning (ADL) courses used to support training within the 4B0X1 career field. Supervisors use this index to determine resources available to support training. Included here are both mandatory and optional courses.

2.2.5. Section E identifies MAJCOM-Unique Requirements.

2.2.6. Section F is specific to AFMS AFSs. It describes the master training plan (MTP) and training documentation.

2.3. At unit level, supervisors and trainers will use Part II to identify, plan, and conduct training commensurate with the overarching developmental goals specified in this CFETP.

3. Use of the guidance provided in this CFETP provides the foundation for effective and efficient training of individuals in the 4B0X1 career field at the appropriate points in their career.

Part I, Section A – General Information

1. CFETP Purpose. The CFETP provides information necessary for the 4B0X1 AF Career Field Manager (AFCFM), 4B0X1 MAJCOM Functional Managers (MFMs), Commanders (CCs), Unit Training Managers (UTMs), supervisors, trainers and the USAFSAM Force Development Division (OED) to plan, develop, manage, and conduct an effective and efficient career field education and training program. The plan outlines training for 4B0X1 Airmen and will assure development to progress and succeed in the career field. The plan identifies initial skills, upgrade, qualification, advanced, proficiency, and continuation training.

1.1. The USAFSAM provides 4B0X1-specific initial skills training upon an individual's entry into the career field. The USAFSAM awards the 3-skill level to BE Apprentice (BEA) course graduates.

1.2. Upgrade training (UGT) identifies the mandatory courses, task qualification requirements, Career Development Course (CDC) completion, correspondence course completion, and minimum experience required to award the 5-, 7-, and 9-skill levels.

1.3. Qualification and/or job proficiency training (along with job experience) is hands-on task performance training designed to qualify an Airman in a specific duty position. This training can occur both during and after the UGT process. It provides the performance skills and knowledge training required to do the job.

1.4. Advanced training is formal course training that provides individuals who are qualified in one or more positions of their specialty with additional skills and knowledge to enhance their expertise in the career field. Training is for selected career airmen at the advanced level of their AFS.

1.5. Position qualification training is designed to qualify an Airman in a specific position. This training occurs after UGT.

1.6. Proficiency training is additional training, either in-residence or exportable advanced training courses, or OJT, provided to personnel to increase their skills and knowledge beyond the minimum required for upgrade.

1.7. Continuation training is additional advanced training exceeding the minimum UGT requirements with emphasis on present or future duty assignments.

1.8. The CFETP has several purposes, some of which are:

1.8.1. Serves as a management tool to plan, develop, manage, and conduct a career field training program. Also, ensures that established training is provided at the appropriate point in an individual's career.

1.8.2. Identifies task and knowledge training requirements for each skill level in the specialty and recommends training throughout each phase of an individual's career.

1.8.3. Lists training courses available in the specialty, identifies sources of the training, and provides the training medium.

1.8.4. Identifies major resource constraints that impact implementation of the desired career field training program.

2. CFETP Use. The CFETP is maintained and certified by the 4B0X1 AFCFM. The USAFSAM/OED staff and MFMs review the plan annually to ensure currency and accuracy. The 4B0X1 AFSC Training Manager at the USAFSAM/OED is delegated action officer authority to facilitate CFETP maintenance. Career field training managers at all levels use the plan to ensure a comprehensive and cohesive training program is available for each individual in the career ladder.

2.1. The USAFSAM/OED staff develop and revise formal resident, nonresident, field, and exportable training based on requirements established during Utilization and Training Workshops (U&TWs) and documented in Part II of this CFETP. They also develop procurement and acquisition strategies to obtain resources needed to provide the identified training.

2.2. 4B0X1 MFMs in coordination with the MAJCOM SGPB ensure their training programs complement the CFETP mandatory initial skill, upgrade, and proficiency requirements.

2.2.1. 4B0X1 MFMs in coordination with the MAJCOM SGPB also identify the needed AF Job Qualification Standards (AFJQSs)/AFQTPs to document unique UGT and continuation training requirements. Requirements are satisfied through OJT, resident training, contract training, or exportable courseware/courses. MFMs will identify MAJCOM-developed training to support this AFS for inclusion in this plan, and the training must not duplicate available training resources.

2.3. The USAFSAM/OED develops the AFJQS and AFQTPs based on requests submitted by the MAJCOMs and according to the priorities assigned and approved by the 4B0X1 AFCFM.

2.4. Unit-level enlisted specialty training (EST) managers and supervisors manage and control progression through the career field by ensuring individuals complete the mandatory training requirements for skill upgrade specified in this plan and MAJCOM supplemental training requirements. The list of courses in Part II is used as a reference for planning continuation, supplemental, or career enhancement training.

2.5. Individual 4B0X1 Airman will complete mandatory EST requirements specified in this plan to include respective UGT and continuation training plus associated third party certifications.

2.6. Scope of Practice/Responsibility. Total force BE enlisted personnel may be asked to perform tasks beyond their normal training and scope of practice and responsibility. Scope of practice and responsibility is outlined in terms of this CFETP and is defined as the extent or range of subject knowledge, task knowledge, and task performance that BE personnel apply in the performance of duty at the appropriate skill level.

2.6.1. When the Medical Group (MDG) leadership team validates requirements to utilize 4B0X1 Airmen to perform clinical or non-clinical tasks outside their scope of practice (i.e. another primary AFS' mission space for which an AFS is organized, equipped and trained to execute), the organization must request approval for scope of practice/responsibility waiver. Scope of practice/responsibility waivers, in this context, should not be confused with utilization of human capital for Unit/CC approved and validated short-term manpower support to efforts commonly referred to as 'details' or projects. In accordance with (IAW) AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*, "Commander and Supervisor shall: Assign personnel to authorized positions consistent with requirements, Airman's grade, and skill/qualification level." "The Military Personnel Section may authorize using airman through Senior Master Sergeant (SMSgt) outside their Control AFSC (CAFSC) up to 130 days in any 12 month period." However, to negate any career regression, the basis for an airman's prolonged assignment outside of the normal career progression pattern must be limited and rotational.

Typically, details and projects should not exceed 130 days in duration unless member is part of official AEF or special authorized tasking (i.e. AEF center validated Third Country National duty tasking). Procedures to request a scope of practice/responsibility waiver are outlined in AFI 44-119, *Medical Quality Operations*, and also highlighted in the following paragraphs 2.6.2. – 2.6.5.:

2.6.2. The utilization of total force 4B0X1 technicians for extended scope of practice must meet three (3) criteria:

2.6.2.1. The expanded scope of practice/responsibility of the task must be mission essential.

2.6.2.2. The member must be trained and certified for the expanded scope by a competent and certified trainer and the training must be documented. Training requirements must meet the standards established in Air Force Instruction (AFI) 36-2201, *Air Force Training Program*.

2.6.2.3. The expanded role is restricted solely to military mission performance and it requires annual review and approval.

2.6.3. The AFCFM is the final waiver authority for enlisted scope of practice/responsibility waivers. Prior coordination is recommended as the matter may be avoided with proper chain of command notification of mission and resourcing needs and changes. When requesting the scope of practice/responsibility waivers for 4B0X1, the enlisted waiver routing process is as follows:

2.6.3.1. Scope of practice/responsibility waivers are required to authorize the use of 4B0X1 personnel in performance of 4N0X1-related tasks along with other medical (4X) AFSCs' CFETP-listed tasks. For example, in the case of waiver requests to perform 4N0X1-related tasks, route the scope of practice/responsibility waiver as follows: BE Flight (BEF) CC, Squadron CC, Military Treatment Facility (MTF) 4B Functional Manager (FM) and 4N FM, SGP, SGN, SGH (SGN, SGH only required for waivers to perform 4N0X1 tasks), MTF CC, MAJCOM SGPB/SGP/SG, HAF SG3P (Attention: 4B0X1 AFCFM).

2.6.3.2. Special authorization is required to use 4B0X1 personnel in performance of installation and unit specialized teams other than the BE Response Team. Other specialized teams formed to support emergency response operations becomes a team member's primary duty during response, exercises and training events. BE team members should not be assigned conflicting emergency duties such as tasking and assigning 4B0X1 Airmen for resource augmentation duty (READY). IAW AFI 10-2501, *Air Force Emergency Management Program Planning and Operations*, "Emergency Responder duties have priority over other assigned duties. Emergency Responders are not assigned as augmentees or to additional duties that will conflict with their emergency duties." As emergency responders, committing or double tasking BE Team Emergency Response members for READY, or any other augmentee role outside the scope of preventive medicine emergency response role puts the BE Response Team, MTF and its medical specialized teams at risk for degraded or mission failure under primary installation Chemical, Biological, Radiological, and Nuclear (CBRN) incident and response force activities. Unit CCs and supervisors of specialized emergency response team members must understand that when unit specialized teams are recalled, that team's duties become the member's primary duty. Double tasking should be avoided, be approved by the chain of command, be noted in the Medical Readiness Council minutes, as well as elevated to the MAJCOM SGPB and SGP for situational awareness. Unlike work details that are not tied to emergency, disaster or Medical Counter (MC)-CBRN response requirements (i.e. wing honor guard details), BE personnel must be capable of being recalled back to the primary mission space and to execute Primary AFSC (PAFSC) mission or expeditionary medical requirements as planned and programmed for during contingencies.

2.6.4. Waiver requests will include the following:

2.6.4.1. Rationale for expanding practice to include what human capital, location/host MTF.

2.6.4.2. Specific task(s) to be added and the rationale for expanding practice.

2.6.4.3. Task checklist/algorithm.

2.6.4.4. Training plan, protocol(s), and references.

2.6.4.5. Procedures for competency validation/certification/periodic certification.

2.6.4.6. Plan for obtaining and sustaining competency for expanded practice.

2.6.5. All waiver requests must be resubmitted annually for re-verification and approval.

2.6.6. In all cases, training and periodic requirement, knowledge and skill certifications are formally certified on AF IMT 797, *Job Qualification Standard Continuation/Command JQS* or AF IMT 1098, *Special Task Certification and Recurring Training*, and maintained in the individual's electronic Air Force Training Record (AFTR). Training references for all tasks beyond any individual's scope of practice/responsibility or the CFETP will be maintained in the duty section where these tasks are performed.

2.6.7. BE Law of Armed Conflict (LOAC) Status. Total force BE are permanent AF medical non-combatant assets engaged in the identification, quantification and the control of CBRN/Occupational and Environmental Health (OEH) threats in support of Department of Defense (DoD) Force Health Protection & Readiness (FHP&R). Therefore, 4B0X1 forces are governed by the "special rules governing the conduct of medical personnel on the battlefield" IAW Geneva Conventions and LOAC, whether in-garrison or in a deployed unit type code (UTC) status. A scope of practice/responsibility waiver is not required for 4B0X1 support of MC-CBRN operations. The 4B0X1s work closely with Joint Force combatant personnel and the Line of the AF (LAF) to collect, analyze, and communicate CBRN/OEH threat assessment (HTA)/health risk assessment (HRA) data. Combatant Unit/CCs can and will use information developed in the HTA/HRA process to support overall threat assessment and risk management decision-making.

3. CFETP Coordination and Approval. The AFCFM is the approval authority for any official change(s) made to the CFETP. The 4B0X1 AFSC Training Manager officially initiates and coordinates the annual CFETP review and reports deficiencies to the AFCFM at least 45 days before the anniversary date of the CFETP IAW AFI 36-2201. Annual CFETP review between the USAFSAM/OED and appointed MAJCOM representatives (typically appointed 4B0X1 MFMs in coordination with MAJCOM/SGPB) is accomplished to ensure currency and accuracy and to eliminate any duplicate training. Deficiencies that may adversely impact the AFS or mission must be identified immediately using official memorandum of record coordinated with the MAJCOM SGPB.

Part I, Section B - Career Progression and Information

4. Specialty Description. BE performs, directs, and manages the technical aspects of military OEH risk management (OEH-RM). The scope of work includes anticipating, recognizing, evaluating, and controlling exposure(s) to chemical, biological, radiological and nuclear (CBRN) threats in addition to other physical hazards like directed energy (DE), thermal stress, and hazardous noise as well as human factors (HFs) such as ergonomic stressors. The operating environment includes both garrison and deployed settings, at the tactical through strategic levels, across the full range of military operations. Roles include, but are not limited to, nuclear enterprise (NE) support and incident response, installation and mission support, base bed-down and recurrent site assessment, anti-terrorism and force protection (AT/FP), humanitarian assistance and disaster relief (HADR), partnership building, and consequence management. Deliverables include routine and emergency exposure sampling, analysis, and monitoring; qualitative and quantitative HRAs; health risk communication; and exposure informatics. Exposure data for all media including air, water, soil, surface, and human-systems interfaces feed the DoD health surveillance system. BE personnel lead the implementation of health-related federal mandates from the President of the United States, DoD, US Occupational Safety and Health Administration (OSHA), US Environmental Protection Agency (EPA), US Nuclear Regulatory Commission (NRC), operations orders, and status of forces agreements. Accessions and force development center on required aptitude, behavior, knowledge and skills in physical and life Science, Technology, Engineering, Mathematics (STEM).

4.1. Specialty Summary. Read the most current and official 4B0X1 summary in *The Air Force Enlisted Classification Directory (AFECD)* which can be accessed via the “myPers” website, https://gum-crm.csd.disa.mil/app/answers/detail/a_id/7504/kw/afecd. Refer to paragraph one (1) of the AFECD for the Specialty Summary and paragraph two (2) for the duties and responsibilities.

4.1.1. 4B0X1 Specialty Summary. Perform and manage occupational and environmental health (OEH)-related activities to include anticipating, recognizing, evaluating, and controlling exposure(s) to chemical, biological, and radiological hazards in garrison and deployed settings. Perform health risk assessments (HRAs) by monitoring and sampling to identify and quantify CBRN hazards. Provide expert health risk communication to support commander’s decision making and to prevent short and long term health effects to all personnel residing and/or working on the installation. Related DoD Occupational Subgroup: 132200.

4.2. Duties and Responsibilities.

4.2.1. Conduct preventative medicine studies in support of health-related base vulnerability assessments (VAs) (i.e. water and toxic industrial chemicals (TIC)/toxic industrial materials (TIM)). Coordinate with the base Anti-Terrorism/Force Protection (AT/FP) Office, Civil Engineering (CE), Security Forces (SFs), and other applicable Air Force Medical Service (AFMS) counterparts to locate and identify critical infrastructure and components and develop a mitigation plan. Use existing sources of intelligence to identify potential future threats. Assess overall vulnerabilities and provide recommendations to commanders to minimize health risk(s) to base personnel and mission.

4.2.2. Identify and approve potable and non-potable water sources. Analyze local surface and ground water sources to determine the potability for both drinking and recreational purposes. Address health risks associated with non-potable water and communicate effective solutions to address potential health concerns.

4.2.3. Execute OEH Site Assessments (OEHSAs). Collect site-specific data to characterize exposure pathways and levels to chemical, physical or radiological contaminants while in garrison and deployed. Identify OEH hazards and risks that may negatively impact health, human

performance, and environmental health quality and communicate/advise the commander(s) and key site planning leadership of assessment results for use in site selection and site bed down planning in all operational environments. Document OEHSAs findings in the approved OEH management information system (OEH-MIS)

4.2.4. Respond to accidents, natural disasters, and attack by hostile forces that may result in exposure(s) to OEH threats. Perform on-site HRAs within potential exposure zone(s), communicate health risk(s) to the commander, and document information regarding exposure(s) in the approved OEH-MIS.

4.2.5. Identify health hazards to all personnel residing and/or working on the installation. Anticipate and recognize actual or potential chemical, biological, radiological, nuclear and physical health threats. Collaborate with CE and other base personnel to locate and identify hazards from occupational, environmental, and recreational sources. Analyze and evaluate actual or potential health threats using available equipment.

4.2.6. Coordinate with certified laboratories to collect, preserve, package, and ship samples associated with an emergency response in garrison or while deployed.

4.2.7. Conduct post-exposure investigations. Use analytical or predictive exposure modeling data to mitigate or eliminate health risks during future operations or other similar and concurrent operation by making recommendations to commanders.

4.2.8. Provide control recommendations to mitigate or eliminate OEH and CBRN health threats. Apply the hierarchy of hazard control – first apply/use engineering controls, then apply/use administrative controls and lastly, recommend personal protective equipment.

4.2.9. Determine protective measures in CBRN operating environments. Provide relevant threat control recommendations to the commander with respect to real-time and future operations. Consult with shelter management teams to determine the adequacy of collective protection for controlling health threats and perform health risk assessments to determine when to release personnel from collectively protected facilities.

4.2.10. Associate exposure(s) with affected personnel. Document exposures of affected individuals and at-risk populations using the approved OEH-MIS (i.e. the Defense Occupational and Environmental Health Readiness System (DOEHRS)) in order to establish an individual longitudinal exposure record (ILER).

4.2.11. Participate in risk management/communication. Advise senior leadership and affected communities on health risks associated with operations and missions, the environment, and recreational activities. Effectively communicate on health effects, control measures, and outcomes.

4.3. BE Mission. Provide operational health risk assessment expertise to decision makers at all levels to improve the health of Airman.

- Systematically and proactively identify health hazards, assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of Airman.
- Effectively communicate operational health risks and appropriate courses of action to prevent illnesses and injuries.
- Enhance operational health capabilities through effective identification, analysis, control, documentation, and communication of chemical, biological, radiological, nuclear, physical, and ergonomic health risks.

4.4. BE Vision. Optimize combat capabilities by preventing casualties and enhancing performance in home station and deployed environments through full spectrum threat and hazard identification and health risk assessments.

4.5. The BE Capabilities. The BE career field provides CCs (home station and combatant) with expeditionary MC-CBRN capabilities, a critical part of the Aerospace Medicine Enterprise's (AME's) four (4) effects-based mission areas and the six (6) major Aerospace Medicine programs. The AME effects-based mission areas are promote and sustain a healthy and fit force; prevent illness and injury; restore health; and optimize and sustain human performance. The BEE mission-enabling capabilities and legacy of proven direct LAF and "operator" level support is one that the SECAF and CSAF recognize as the AFMS 'trusted care, anywhere,' and as critical to the AF "to fly, fight, and win" mission.

4.5.1. The five (5) BE Capabilities are:

4.5.1.1. Provide health surveillance: Health surveillance capability promotes force generation through sampling, identification, quantification, assessment, risk communication, control, and documentation of potential exposures.

4.5.1.2. Plan, prepare for, and provide real-time CBRN response: Planning, preparing for, and providing real time response is provided through intelligence, surveillance, risk assessment, decision support, protective measures, and sample preservation while operating in cold, warm and hot zones.

4.5.1.3. Ensure safe potable/non-potable water: Through our sampling, system analysis and field sanitation assessments, provide accurate assessments of potable and non-potable water.

4.5.1.4. Reduce vulnerabilities: Identify and reduce health risk through intelligence reviews and specialized vulnerability assessments including water and toxic materials/chemicals.

4.5.1.5. Reduce health risks: Through flexible and sustainable force health protection recommendations to predict and reduce adverse health effects in all occupational, environmental, and CBRN operations.

4.6. Product Lines. STEM-based OEH threat/risk assessment empowers commander decision-making in balancing operational mission requirements for the air component and Joint Force with DoD FHP&R imperatives. Strong, defensible OEH informatics and knowledge management feeds DoD health surveillance and Presidential Directive-5 mandated ILER, enabling force protection and patient-centered health care today along with accurate veteran disability compensation tomorrow. Value is maximized for both the taxpayer and warfighter through the following product lines:

- CBRN Readiness & Emergency Response
- Drinking Water Quality & Protection
- Nuclear Weapons Intrinsic Radiation (INRAD) Safety
- OEH Knowledge Management & Exposure Informatics
- OEH Threat Mitigation & Risk Communication
- OEH Threat Surveillance & Exposure Analysis
- Radiation Health & Safety

5. Skill/Career Progression. Adequate training is essential to timely progression of personnel from apprentice to the superintendent skill levels and training also plays an important role in the AF's ability to accomplish its mission. Everyone involved in training must do their part to plan, manage, and conduct effective training programs. Following the guidance provided in this part of the CFETP and the BE Career Path table will ensure individuals receive required training at appropriate points in their careers.

Airmen should also review career progression information tailored to their grade and AFSC in the “Career Path Tool” accessible through the AF Portal and later discussed in paragraph 9.1. **NOTE:** Additional mandatory requirements for UGT to each skill level are covered in Part I, Section C of this CFETP.

5.1. Apprentice/3-Skill Level. Initial skills training in the 4B0X1 AFS consists of the tasks and knowledge training provided at the USAFSAM’s BEA in-residence course. Individuals must successfully complete career field basic principles and fundamentals through technical training and task demonstrations, and also be recommended for advancement to the apprentice level by the BEA course supervisor. The decision to train specific tasks and knowledge items in the BEA course is based on a review of the Occupational Analysis Report (OAR), training requirements analysis (TRA) data, and input from 4B0X1 subject matter experts (SMEs). The STS, Section A Part II of the CFETP, identifies these task and knowledge training requirements.

5.1.1. Individual Studies. Apprentices should begin and strive to complete requirements for the Community College of the Air Force (CCAF) Associate of Applied Science (AAS) BE Technology degree. Authorization must be granted by the members’ supervisor to enroll in off-duty college education, which must not interfere or delay progress in adapting to the USAF military requirements and achieving occupational proficiency. For more information regarding the CCAF degree program, reference Part I, Section B – Career Progression and Information.

5.2. Journeyman/5-Skill Level. Upgrade training to the 5-skill level in this specialty starts immediately after assignment to the duty position as an apprentice/3-skill level.

5.2.1. Upgrade Requirements. Specific knowledge, education, training, experience, other requirements along with, training resources plus implementation of journeyman training requirements are found in the correlating specialty qualification tables found in Part I, Section C – Skill Level Training Requirements. In this specialty, UGT to the 5-skill level consists of successfully completing the following requirements:

5.2.1.1 OJT. A minimum of 12 months of OJT (9 months for those in retraining status) is required. Five (5) skill level UGT periods over 24 month’s duration is considered excessive (36 months for Air National Guard (ANG) only). (AFI 36-2201, paragraph 6.3.1.9.7.)

5.2.1.2. Task Qualification. All core tasks, specified by a five (5) in column two (2) of the STS, and assigned duty position must be complete.

5.2.1.3. AFJQS/AFQTP. Successful qualification in all critical task and/or equipment at assigned location by duty positions is required. Third party task certifications are required for all core tasks using AFQTPs. Once task certified, performance of that task may be accomplished without supervision.

5.2.1.4. CDC. Apprentices seeking journeyman/5-skill level certification must complete six (6) volumes of 4B051 CDCs that culminate with passing a closed-book proctored ‘end of course’ examination.

5.2.1.5. Approval Authority: Must be recommended by the supervisor plus approved by the commander’s for formal skill upgrade. UTM’s assist the supervisor and CCs in this process as specified in AFI 36-2201.

5.2.2. Proficiency Training: AF proficiency training and certification requirements for 4B0X1 are detailed in paragraph [7.5](#). The majority of Senior Airman (SrA)/4B051s will attend Airman Leadership School (ALS) after reaching 48 months Total Active Federal Military Service (TAFMS) or after being selected for promotion to SSgt (for specifics, see AFI 36-2301, *Developmental*

Education). Upon ALS graduation, journeymen are considered for appointment as supervisors. Appointment in supervision of people, materials, functions or small (simple) BE programs shall be commensurate with individuals certified plus demonstrated institutional and occupational competency levels. Individuals are challenged and rewarded with increased responsibilities to prepare for and advance to the next level of competency, developmental education, training, and experience opportunities directly correlating to mastery of progressively complex task competencies.

5.2.2.1. Developmental and Continuing Education. To prepare for promotion under the Weighted Airman Promotion System (WAPS), individuals use 4B0X1 CDCs and other reference material as listed in the Enlisted Promotion References and Requirements Catalog (EPRRC). Completing the BE Technology AAS degree is expected and relevant to build BE competencies and foundation to continue advancing in skill and grade. Upgrading to the 5-skill level is considered an internship which results in eight (8) semester hours (SHs) of CCAF degree credit.

5.2.2.2. Developmental Special Duties (DSDs). SrA who achieve the journeyman/5-skill level are eligible for DSD vectoring as a USAFSAM Technical Training Instructor (BEA course), Enlisted Professional Military Education (EPME) Instructor, or Recruiter. **NOTE:** DSDs subject to change.

5.2.2.3. Key Developmental Positions (KDPs) – CAFSC Specific (SrA-SSgt): SrA and SSgts who achieve the journeyman/5-skill level are eligible for various CAFSC 4B0X1 special duties that offer a means to develop and broaden BE experience. While specializing as a SME in OH/IH, EH, Radiation/Nuclear Health and Safety, and MC-CBRN, these unique opportunities offer experience working with the scientific or engineering designs, research and development (R&D), and testing functions associated with each area, instructor position, and/or position organic to LAF or Joint Forces. Seek guidance and mentoring from supervisors, leaders, and personal mentors as well as special duty incumbent as mentioned in [Part I, Section B, paragraph 9.3.](#)

5.2.2.3.3. SSgt (T4B051) – Instructor, Contingency Skills, USAF Expeditionary Center; Joint Base (JB) McGuire-Dix-Lakehurst, NJ.

5.2.2.3.4. SSgt (T4B051/T4B071) – Instructor, Medical Readiness, Medical Readiness Training Center (MRTC), Camp Bullis, TX.

5.2.2.3.5. SrA/SSgt (A4B051) – NCOIC, Environmental Safety and Occupational Health; Air Force Research Lab (AFRL), WPAFB, OH.

5.2.2.3.6. SrA (4B051) – Bioenvironmental Engineering Technician, Uniformed Services University of Health Sciences (USUHS); Bethesda City, MD.

5.3. Craftsman/7-Skill Level. Upgrade training to the 7-skill level starts on the first day of the promotion cycle once selected for promotion to the rank of SSgt. In the case of SSgt retrainees, UGT starts upon award of the 5-skill level.

5.3.1. UGT Requirements: Specific knowledge, education, training, experience, other requirements along with training sources and resources plus implementation of journeyman training requirements are found in the correlating specialty qualification tables found [Part I, Section C – Skill Level Training Requirements](#). In this specialty, UGT to the 7-skill level consists of successfully completing the following requirements:

5.3.1.1. OJT: A minimum of 12 months of OJT (6 months for those in retraining status) is required. Seven (7) skill level UGT periods over 24 months in duration is considered excessive (36 months for ANG only). (AFI 36-2201, paragraph 6.5.2.1.7.)

5.3.1.2. Task Qualification: All core tasks as specified by a seven (7) in column two (2) of the STS, and assigned duty tasks must be complete.

5.3.1.3. AFJQS/AFQTP. Successful qualification in all critical task and/or equipment at assigned location by duty positions is required. Third party task certifications are required for all core tasks using AFQTPs. Once task certified, performance of that task may be accomplished without supervision.

5.3.1.4. Advanced Training. Upon completion of requirements in paragraphs 5.3.1 – 5.3.1.3., journeyman seeking 7-skill level upgrade qualification are required to attend the USAFSAM BE Occupational Health Measurements (OHM) course. Completion of this course is mandatory for upgrade to the 7-skill level. (Not waivable)

5.3.1.5. Approval Authority: Must be recommended by the supervisor and formally approved by the commander for skill level upgrade. The UTM assists the supervisor and CCs in this process as specified in AFI 36-2201.

5.3.2. Proficiency Training: Once upgraded to the 7-skill level, a craftsman maintains competency by completing all continuation and proficiency training required or specified by command and/or local policies. AF proficiency training and certification requirements for 4B0X1s are detailed in paragraph [7.5](#), and the periodic task training and certification requirements are identified in six (6) separate AF IMT 1098s. The AF IMT 1098s are located on the [BE Functional Area](#) of the AF Portal at <https://www.my.af.mil/gcss-af/USAF/ep/browse.do?programId=t330D98A14855F40F01486B121BA40660&channelPageId=s2D8EB9D6408E0AD001414B3FCEDF1549>. A 4B071 is expected to fulfill various supervisory, management, and leadership positions such as NCOIC of an element, flight, or larger functional program area with many interrelated and interdependent multi-faceted task challenges. Craftsman must develop a strong understanding of “why” duties and tasks are executed to expand the knowledge and occupational leadership competencies needed to advance technical skills to highest levels while immersing and garnering the knowledge of the organization’s business practices and rules needed to manage change and operational health risk management priorities while concurrently developing others’ skills.

5.3.2.1. Developmental and Continuing Education. Completion of relevant USAFSAM BE advanced training courses is highly recommended upon assignment as an element leader or a large functional area program manager. BE Craftsman may also increase their breadth and depth of technical skills, management, and leadership experience in the full-spectrum of BE duties and operational program areas by serving in additional duty institutional roles and deploying. These opportunities assist BE Craftsman to expand their exposure to the AFMS organizational business practices and gain an understanding of the business aspects of the military health system which is required for career development and succession as an AF medic. The BE Advanced Workshop (BEAW) is also an important part of development. This workshop offers attendees the most up-to-date and relevant work requirements applicable to current and future BE business and operating business practices. Prior to promotion to Master Sergeant (MSgt), craftsmen will be selected to attend the USAF NCO Academy (NCOA) or may have the opportunity to attend a Sister Service Academy; see AFI 36-2301 for specific EPME requirements and timelines. As an expected career progression milestone and to strengthen BE occupational competencies, craftsmen should strive to complete the AAS in BE Technology degree. Furthering education which leads to the award of a 4B0X1-relevant bachelor’s degree is highly encouraged upon CCAF degree graduation. For more information on relevant BE bachelor degree programs, refer to paragraph [8.4](#).

5.3.3. DSD. SSgt, Technical Sergeants (TSgts), and MSgts who achieve the craftsman /7-skill level are eligible for DSD vectoring (as indicated by specified pay grade): USAFSAM Technical Training Instructor (E5-E8), Career Assistance Advisor (CAA) (E7-E8), Military Training Instructor (MTI) (E6-E7), Military Training Leader (MTL) (E5-E8), USAFA Military Training (AMT) (E6-E7), Airman & Family Readiness Center (A&FRC) NCO (E6-E8), First Sergeant (entry as E7), USAF Honor Guard, Recruiter (NCO positions only), Recruiter (E5-E7) and EPME Instructor (E5-E8).

5.3.3.1. With the exception of the USAFSAM Technical Training Instructor (T4B0X1), which is both an occupational and institutional career broadening opportunity, DSDs identified with a special duty identifier (SDI) (i.e. CAA, MTI, MTL, A&FRC NCO, First Sergeant, USAF Honor Guard, Recruiter, and EPME instructor) are considered institutional career-broadening and experience opportunities. With the exception of the enlisted serving as T4B0X1 Instructor, enlisted members are expected to return to the original CAFSC after serving 3 or 4 years in a DSD with SDI. Waivers to extend past the normal tour length in SDI are made by exception and based on the needs of the AF and best interest of the Airman's developmental needs.

5.3.3.2. Special Duty Assignments (Cross-Flow). First-term and career 4B0X1 Airmen possessing the listed qualifications in the [AFPC Assignment Management System \(AMS\)](https://afas.afpc.randolph.af.mil/AMSNET/default.aspx) (URL: <https://afas.afpc.randolph.af.mil/AMSNET/default.aspx>) listed Equal Plus job advertisement may apply for advertised special duty positions, and further align personal and professional goals with the needs of the AF. Special duty assignments may be core AFSC-validated special duty positions or validated special duty positions open to cross-flow AFSCs (such as certain liaison or embassy duty positions, dormitory leader duty that may require duty AFSC change to a temporary but new SDI). Approval is based on manpower levels for applicants' rank, or projected rank, and the overall health of the career field. Airman's skill level award must correlate with rank requirements at the time of application.

5.3.3.3. KDPs – CAFSC Specific (TSgt-MSgt). Various CAFSC 4B0X1 special duty positions are available and offer a means to broaden and develop BE experience, specializing as subject matter experts in OH/IH, EH, Radiation/Nuclear Health and Safety, and MC-CBRN. Additionally, these unique opportunities offer experience working the scientific or engineering design, development, testing and research functions associated with these broad areas, instructor positions, and/or unique SME positions organic to LAF or Joint Forces. Seek guidance and mentorship from supervisors, leaders, and mentors as well as the special duty incumbent as mentioned in [Part I, Section B, paragraph 9.3](#).

5.3.3.3.1. MSgt (4B071) - Manager, Bioenvironmental Engineering (4B) Enlisted Force; Air Force Medical Support Agency (AFMSA)/Bioenvironmental Engineering Branch (SG3PB); Falls Church, VA.

5.3.3.3.2. MSgt (4B071) - Manager, CBRN/Homeland Medical Plans/Programs, AFMSA/Readiness Division (SG3X); Falls Church, VA.

5.3.3.3.3. MSgt (4B071) - 4B0X1 Functional Manager, Headquarters (HQ) Air Mobility Command (AMC)/Surgeon General (SG); Scott AFB, IL.

5.3.3.3.4. MSgt (4B071) - Superintendent, USAF Center for Unconventional Weapons Studies (CUWS); Maxwell AFB, AL.

5.3.3.3.5. MSgt (4B071) – Manager, Air Force District of Washington, Special Missions Division; JB Andrews, MD.

5.3.3.3.6. MSgt (4B071) – Manager, Joint Staff Integrated Vulnerability Assessments; Fort (Ft) Belvoir, VA.

5.3.3.3.7. MSgt (4B071) – Manager, Industrial & Occupational Health; Air Force Operational, Test, & Evaluation Center (AFOTEC), Kirtland AFB, NM.

5.3.3.3.8. MSgt (4B071) – Manager, Industrial & Occupational Health; AFOTEC, Eglin AFB, FL.

5.3.3.3.9. MSgt (4B071) – Section Chief, USUHS Environmental Health and Occupational Safety, USUHS; Bethesda City, MD.

5.3.3.3.10. MSgt (T4B071) - Flight Chief, Academic Support; Defense Medical Readiness Training Institute; Ft Sam Houston, TX.

5.3.3.3.11. MSgt (4B071) - Manager, Medical Environmental Service Contract (COTR); Cape Canaveral Air Station, FL.

5.3.3.3.12. MSgt (A4B071) – Manager, Technical Operations Division; USAFSAM, WPAFB, OH.

5.3.3.3.13. MSgt (A4B071) – Manager, Analytical Services Division; USAFSAM.

5.3.3.3.14. MSgt (4B071) – Flight Chief, Bioenvironmental Engineering; DATA MASKED LOCATION.

5.3.3.3.15. MSgt (4B071) – Flight Chief, Bioenvironmental Engineering; Barksdale AFB, LA.

5.3.3.3.16. MSgt (4B071) – Flight Chief, Bioenvironmental Engineering; FE Warren AFB, WY.

5.3.3.3.17. MSgt (4B071) – Flight Chief, Bioenvironmental Engineering; Malmstrom AFB, MT.

5.3.3.3.18. MSgt (4B071) – Flight Chief, Bioenvironmental Engineering; Minot AFB, ND.

5.3.3.3.19. MSgt (4B071) – Flight Chief, Bioenvironmental Engineering; Whiteman AFB, MO.

5.3.3.3.20. TSgt (4B071) - Course Manager, Defense Nuclear Weapons School (DNWS); Kirtland AFB, NM.

5.3.3.3.21. TSgt (4B071) – NCOIC, Bioenvironmental Engineering, AFRL Detachment 7; Edwards AFB, CA.

5.3.3.3.22. TSgt (4B071) – NCOIC, USAFE Emergency Medicine Flight, 435 Contingency Response Group (CRG); Ramstein AB, Germany.

5.3.3.3.23. TSgt (4B071) – NCOIC, PACAF Emergency Medicine Flight, 36 CRG; Andersen Air Base (AB), Guam.

5.3.3.3.24. TSgt (4B071) – NCOIC, Industrial Hygiene & Environmental Health, USUHS; Bethesda City, MD.

5.3.3.3.25. TSgt (TB071) – Instructor, Medical Readiness Training Center (MRTC); Camp Bullis, TX.

5.3.3.3.26. TSgt (4B071) - NCOIC, Environmental Health Division, National Center for Medical Intelligence (NCMI); Ft Detrick, MD.

5.3.3.3.27. TSgt (4B071) – NCOIC, Bioenvironmental Engineering, Arnold Engineering Development Complex; Arnold, TN.

5.3.3.3.28. MSgt/TSgt (A4B071) – NCOIC, DOEHS'; AF Technical Operations Branch, USAFSAM.

5.3.3.3.29. TSgt/SSgt (A4B071) – Technical Operations Technician; AF Technical Operations Branch, USAFSAM.

5.3.3.3.30. MSgt/TSgt (T4B071) – NCOIC, Apprentice Training Branch; USAFSAM.

- 5.3.3.3.31. MSgt/TSgt (T4B071) – NCOIC, Advanced Training Branch; USAFSAM.
- 5.3.3.3.32. MSgt/TSgt (T4B071) – NCOIC, Management Training Branch; USAFSAM.
- 5.3.3.3.33. MSgt/TSgt (A4B071) – NCOIC, Consultative Operations Branch; USAFSAM.
- 5.3.3.3.34. TSgt/SSgt (A4B071) – Consultative Technician; AF Consultative Services, USAFSAM.
- 5.3.3.3.35. TSgt/SSgt (A4B071) – NCOIC, Occupational Health Consulting Branch; AF Consultative Services, USAFSAM.
- 5.3.3.3.36. TSgt/SSgt (A4B071) – NCOIC, Radiation Health Consulting Branch; AF Consultative Services, USAFSAM.
- 5.3.3.3.37. TSgt/SSgt (A4B071) – NCOIC, Environmental Health Consulting Branch; AF Consultative Services, USAFSAM.
- 5.3.3.3.38. TSgt/SSgt (A4B071) – NCOIC, Industrial Hygiene Laboratory; AF Analytical Services Branch, USAFSAM.
- 5.3.3.3.39. TSgt/SSgt (A4B071) – NCOIC, Equipment and Logistics; AF Technical Operations Branch, USAFSAM.
- 5.3.3.3.40. TSgt/SSgt (A4B071) – NCOIC, Specialized Operations; AF Technical Operations Branch, USAFSAM.
- 5.3.3.3.41. TSgt/SSgt (A4B071) – NCOIC, Analytical Laboratories Branch; AF Analytical Services Branch, USAFSAM.
- 5.3.3.3.42. TSgt/SSgt (A4B071) – Analytical Technician; AF Analytical Services, USAFSAM.
- 5.3.3.3.43. TSgt/SSgt (A4B071) – NCOIC, Analysis Support Branch; AF Analytical Services Branch, USAFSAM.
- 5.3.3.3.44. TSgt/SSgt (A4B071) – NCOIC, Radioanalytical Laboratory; AF Analytical Services Branch, USAFSAM.
- 5.3.3.3.45. TSgt/SSgt (A4B071) – NCOIC, Radiation Calibration Laboratory; AF Analytical Services Branch, USAFSAM.

5.4. Superintendent/9-Skill Level. Upon promotion to SMSgt and after satisfying the requirements of AFI 36-2101, AFSC 4B091 will be awarded. A Superintendent is expected to fill positions such as Superintendent of a BEF and may perform additional duty as a squadron superintendent (SQ/CCC).

5.4.1. Developmental and Continuing Education. Additional training in the areas of resource management, to include planning, programming, budgeting and execution (PPB&E) and manpower and personnel management should be pursued through continuing education. Higher education, greater responsibility within the MTF and in the host unit, base, or community, plus deployment experience is expected of Senior NCOs (SNCOs).

Upon CCAF degree completion and graduation, further education leading to the award of a 4B0X1-relevant bachelor's degree is highly encouraged. For more information on relevant BE bachelor degree programs, refer to paragraph Part I, Section B, [8.4](#).

5.4.2. DSD. Eligible SMSgts awarded the Superintendent/9-Skill Level may be selected for the following DSDs: USAFSAM Technical Training Instructor (T4B091 serves as 4B0X1 Force Developer & Superintendent, Force Development Division), CAA, MTL, A&FRC NCO, and PME Instructor.

5.4.3. KDPs – CAFSC Specific (SMSgt): KDPs offer a means to broaden and to develop BE leaders for career opportunities across the AF enterprise. Leaders holding these positions are traditionally positioned to compete for future key leadership positions. They provide leadership, management, and guidance in organizing, equipping, training, and mobilizing the organization to meet mission requirements. Seek guidance and mentorship from supervisors, leaders, and mentors as well as the special duty incumbent as mentioned in Part I, Section B, paragraph [9.3](#).

5.4.3.1. SMSgt (T4B091) - Superintendent, Force Development Division; USAFSAM/OED, WPAFB, OH. Incumbent serves as the 4B0X1 Force Developer (also referred to as the 4B0X1 AFSC Training Manager).

5.4.3.2. SMSgt (A4B091) - Superintendent, Consultative Services Division; USAFSAM/OEC.

5.4.3.3. SMSgt (A4B091) - Superintendent, USAFSAM Detachment 3; Kadena AB, Japan.

5.4.3.4. SMSgt (4B091) - 4B0X1 Functional Manager, HQ AF Global Strike Command (AFGSC)/SG; Barksdale AFB, LA.

5.4.3.5. SMSgt (4B091) - 4B0X1 Functional Manager, HQ United States Air Forces in Europe (USAFE)/SG; Ramstein AB, Germany (GE).

5.4.3.6. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; WPAFB, OH.

5.4.3.7. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; JB Andrews, MD.

5.4.3.8. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; Robins AFB, GA.

5.4.3.9. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; Hill AFB, UT.

5.4.3.10. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; Eglin AFB, FL.

5.4.3.11. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; Osan AB, S. Korea.

5.4.3.12. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; JB Hickam, HI.

5.4.3.13. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; Travis AFB, CA.

5.4.3.14. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; Offutt AFB, NE.

5.4.3.15. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; Shaw AFB, SC.

5.4.3.16. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; Kadena AB, Japan.

5.4.3.17. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; Royal Air Force Lakenheath AB, United Kingdom.

5.4.3.18. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; Ramstein AB, GE.

5.4.3.19. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; Scott AFB, IL.

5.4.3.20. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; Tinker AFB, OK.

5.4.3.21. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; Nellis AFB, NV.

5.4.3.22. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; Vandenberg AFB, CA.

5.4.3.23. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; Edwards AFB, CA.

5.4.3.24. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; Macdill AFB, FL.

5.4.3.25. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; Yokota AB, Japan.

5.4.3.26. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; JB Charleston, SC.

5.4.3.27. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; Kirtland AFB, NM.

5.4.3.28. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; Moody AFB, GA.

5.4.3.29. SMSgt (4B091) – Superintendent, Bioenvironmental Engineering; Peterson AFB, CO.

6. Duty Titles. Duty titles for personnel working in this specialty are governed by AFI 36-2618, *Enlisted Force Structure*, and based on rank, skill level, and actual duty position as specified on the Unit Manning Document (UMD). Enlisted personnel will have a duty title that most accurately reflects their day-to-day duties (i.e. Ground Safety Technician, CAA, and Dedicated Crew Chief). When published, duty titles specified in functional directives will be utilized.

6.1. Authorized Duty Titles. Authorized duty titles shall not be confused with additional duties such as ‘program monitor’ or ‘program manager.’ Appointed additional duties and responsibilities are subordinate to the day-to-day duties and BE operational execution requirements for which the position is authorized, funded, and filled. Those additional duty appointments are expected to follow a standard developmental building block approach detailed in this CFETP. BE personnel must focus their attention on achieving competence demonstrated through performance throughout the continuum of learning (CoL) (i.e. education, training, and experience); focus on this CFETP expressed minimum CoL requirements rather than focusing on the duty title. As such, and when properly utilized/applied, the following duty titles provide clear understanding of the institutional and occupational experience needed for career progression and succession counseling, mentoring, developmental education, and duty vectoring for future duty assignments by all parties concerned (individual, supervisor, CCs). Additional transparency is gained because the entire 4B0X1 career field is aligned to a common operating practice that meets the people and mission resourcing needs and prepares more than one qualified and eligible candidate for developmental opportunities.

6.1.1. Personnel in the 4B0X1 AFS are restricted to one (1) duty title; instances where personnel hold two (2) significant duties (i.e. NCOIC, CBRN Readiness/Response and Environmental Health, etc.), the duty title reflected should be the ‘primary’ position (i.e. where more than 50% of the member’s time is spent performing). (AFI 36-2618, paragraph 7.2)

6.1.2. The authorized enlisted duty titles for 4B0X1s performing specific functional requirements and their explanations are as follows:

6.1.2.1. Bioenvironmental Engineering Apprentice: Instances where a 4B031 trainee is attending the in residence USAFSAM BEA Course and/or when primarily serving in initial unit of assignment positions to fulfill upgrade upon arrival to their first duty station.

6.1.2.2. Bioenvironmental Engineering Journeyman: Instances where a 4B051 operates in PAFSC authorized positions usually located in the tactical operational level of a flight or an element or team within the flight.

6.1.2.3. Bioenvironmental Engineering Craftsman: Instances where a 4B071 operates in their PAFSC and the authorized position is located in the tactical operational level of a flight or an element or team within the flight.

6.1.3. NCOIC: Use of the *NCOIC* title must be strictly limited. The NCOIC title is reserved exclusively for NCOs. In the BE career field, the authorized NCOIC duties titles are determined by the individual’s designated duty position of responsibility and are as follows. **NOTE:** The *Assistant NCOIC* title is not authorized for use.

6.1.3.1. NCOIC, Bioenvironmental Engineering Flight. Instances where a NCO is responsible for managing the BEF (with more than >1 staff personnel assigned) the title, *NCOIC, Bioenvironmental Engineering Flight*, is appropriate.

6.1.3.2. NCOIC, [Element]. Instances where more than one personnel is assigned to an element, the title “*NCOIC, XXXX Element*” is appropriate. Primarily, career field opportunities to serve as NCOIC of an element exists at the large BE tactical operations units. The element leader positions institutionalized in BE tactical/operational/strategic levels expand breadth and depth of occupational experience leveraging resources and teams effecting OH/IH, EH, Radiation/Nuclear Health and Safety, and MC-CBRN operational mission space. Typically, the NCOIC, [Element] is responsible for related programs/tasks being executed by others and for enlisted staff development in the area of oversight. Spending the right amount of time, at the right time, for the right Airmen is critical when building BE enlisted leaders equipped to deal with the myriad of challenges in the BE occupation and AF at all levels. BE enlisted leaders should expand their competencies in targeted BE operational areas. Not all BE enlisted members’ career assignments permit NCOIC, [Element] as primary position duty titles; however, that should not stop any enlisted member from being a leader at their rank and expanding competencies in the aforementioned BE mission spaces and in practicing/demonstrating the institutional competencies valued in the AF. These duty positions and respective titles are not intended to add another layer of back office supervisors. Rather, the positions align with efficient mainstream operational execution requirements, responsibilities, and duties executed in a manner that support the proper building block approach to staff development while getting the mission done. Experiencing the right amount of time leveraging resources and demonstrating leadership capabilities leading teams and executing mission requirements is required. The following functional areas duty positions and titles are authorized.

6.1.3.2.1. NCOIC, Occupational Health(OH)/Industrial Hygiene (IH) Operations Element.

Instances where the NCO is responsible for overseeing, supervising and executing OEH routine and non-routine special IH surveillance programs (i.e. the OH programs with interoperating IH surveillance program management and execution requirements). OH/IH program activities and tasks are central to OEH exposure informatics and foundational to development of BE enlisted OH/IH competencies. The element NCOIC is typically the next in rank order to serve as the BEF Chief.

6.1.3.2.2. NCOIC, Readiness Plans and Operations Element. Instances where the NCO typically oversees CBRN Readiness and Response Operations and associated emergency management plans and programs requirements. Readiness Plans and Operational requirements generally include the logistics readiness functions associated with in-garrison and UTC organizational, equipment/supply reconstitution and training requirements plus lessons learned (i.e. Quantitative Fit-Testing Program (QNFT), vehicle operations, land mobile radio and network control).

6.1.3.2.3. NCOIC, Radiation and Nuclear Health/Safety Operations Element. Instances where the NCO is responsible for supervising and executing routine and non-routine radiation and nuclear health and safety programs. Radiation and Nuclear Health requirements, activities, and tasks central to OEH exposure informatics and foundational to development of BE enlisted competencies in radiological plus nuclear health and safety programs (i.e. associated with medical/dental x-ray, non-destructive inspections, large vehicle inspections, DE/LASERs, electromagnetic field (EMF) radiation, INRAD, nuclear/radioactive material shipments, and occupational worker/fetal protection dose monitoring and investigations/reporting and ILERs). Additionally, this member typically oversees the radiological and nuclear aspects of the installation as the appointed installation radiation safety officer (IRSO) (primary or alternate).

6.1.3.2.4. NCOIC, Environmental Health Operations Element. Instances where the NCO is responsible for supervising and executing routine and non-routine environmental health (EH) programs. EH activities and tasks central to OEH exposure informatics and foundational to development BE enlisted competencies in the subject of EH programs are drinking water quality, field water sanitation, water vulnerability assessments, and emergency response plans and programs associated with installation drinking water supply.

6.1.4. Flight Chief, Bioenvironmental Engineering. An instance where a SNCO is responsible for managing the BEF, the title, *Flight Chief, Bioenvironmental Engineering*, is appropriate.

6.1.5. Superintendent, Bioenvironmental Engineering. The title *Superintendent* is strictly limited for us by SMSgts/4B091s. Typically, Superintendent/4B091s serve at the larger operational flights/MTFs and/or at the AF Materiel Command (AFMC) Air Logistics Centers.

Superintendent/4B091s are expected to fill the role of Unit CC appointed 4B0X1 FM for the MTF.

Exception: MSgts who fill a 4B091 position based on the UMD may use the title *Superintendent*.

MSgts and below filling validated MSgt and below positions will NOT use the title *Superintendent*.

6.1.5.3. Squadron Superintendent, [FILL IN] Aerospace Medicine Squadron. Used by SNCOs who are the SEL of a squadron (i.e. Squadron Superintendent, 18th Aerospace Medicine Squadron). Only SNCOs will hold the duty title of Squadron Superintendent.

6.1.6. Manager, [FILL IN] Bioenvironmental Engineering. SNCOs appointed as functional area managers may use the title *Manager, [FILL IN] Bioenvironmental Engineering*. Manager positions are considered KDPs in the BE Functional Advisory Council for eDTs and limited to the following UMD authorizations.

6.1.7. Chief Master Sergeants (CMSgts): There are seven (7) 4B000 CMSgt positions authorized as of FY 2014: (1) HQ AFMSA (DHHQ), Falls Church VA; (2) USAFSAM/OE, WPAFB, OH; (3) 673 AMDS, JB Elmendorf-Rich, AK; (4) 633 AMDS, JB Langley-Eustis, VA; (5) 87 AMDS, JB McGuire-Dix-Lakehurst, NJ; (6) 60 AMDS, Travis AFB, CA; and (7) 559 MDOS, JB San Antonio-Lackland, TX.

6.1.7.1. Manager, Bioenvironmental Engineering Flight. CMSgt 4B000s may use the title, *Manager, [FILL IN] Flight*. A SMSgt/4B000 assigned to a CMSgt billet may also use this *Manager* title. Although authorized, this duty title is rarely used. Currently, all 4B0 CEMs positions are strategic enlisted leader positions that are at least dual-hatted positions requiring >50% utilization leading broader and larger sized organizations in addition to the flight.

6.1.7.2. Squadron Superintendent. Used for CMSgts and occasionally a SMSgt or MSgt, who is the SEL of a squadron.

7. Training Decisions. The CFETP uses a building block approach to develop the force in the entire spectrum of training requirements for the 4B0X1 career field. The spectrum includes a strategy for when, where, and how to meet the training requirements. The strategy must be apparent and affordable to reduce duplication of training and eliminate a disjointed approach to training. Initial skills and UGT requirements were reviewed, updated, and expanded during the 4B0X1 U&TW held 30 January – 3 February 2012 at USAFSAM. The decision to train specific tasks and knowledge items in the initial skills course is based on 2010 occupational survey report (OSR) data, TRA data, and input from 4B0X1 SMEs. Task and knowledge training requirements are identified in the STS (Part II, Section A of this CFETP). The following training decisions were made during the U&TW:

7.1. The STS was reviewed and updated to include: multiple line items were added, and multiple items were assigned higher proficiency codes to eliminate skill gaps identified during site visits, gap analyses, and U&TW SME feedback.

7.2. Initial (3-level) Skills Training. The U&TW team changed tasks and proficiency codes in the 3-level course column to reflect the career field's desire to increase the amount of hands-on training received by the students. The U&TW added, deleted and modified course line items using OSR as the guiding criteria.

7.3. 5-skill level UGT Requirements. The U&TW team revised the 5-skill level OJT and CDC columns to align and increase proficiency in the subjects and tasks introduced in initial skills training. Third party certifications remain required for all core 5-skill level tasks.

7.4. 7-skill level UGT requirements: The U&TW revised the 7-skill level OJT and CDC columns to align and increase proficiency in the subjects and tasks introduced in initial skills training. Third party certifications remain required for all core 7-skill level tasks.

7.4.1. The U&TW team added multiple tasks and increased multiple proficiency codes in the 7-skill level OJT column.

7.4.2. Advanced Training Courses: The U&TW resulted in major rewrites in advance training course along with validating two advanced training course needs as requirements. Requirements met the AFMS' Force Development Panel resulting in approval to rewrite and build utilizing resources currently programmed for within the BE portfolio at USAFSAM. This drove shifting in-residence knowledge requirements to other respective supplemental training venues (i.e. CDCs and OJT, proficiency training and DL). Access the Education and Training Course Announcement (ETCA) website through the AF Portal at <https://www.my.af.mil/etcacourses/> for course catalog, availability, eligibility requirements, and schedules.

7.4.2.1. Occupational Health Measurements (OHM): The BE Site Assessment (BESA) Part I (ADL) and Part II (in-resident) courses were replaced by the OHM course. The OHM course provides critical advanced occupational HRA training and the prerequisite required for 7-skill level award.

7.4.2.2. Environmental Health Measurements (EHM): The newly added EHM course, directed by the 2012 enlisted U&TW, provides critical advanced environmental HRA training. This course is not required for UGT.

7.4.2.3. Bioenvironmental Engineering Readiness and Deployed Skills (BERDS): The new BERDS course replaces the Bioenvironmental Engineering Emergency Management Response (BEEMR) Part I (ADL) and Part II (in-resident) courses. The BERDS course provides training on critical skills necessary for deployments and Home Station Medical Response (HSMR), and is designed to eliminate readiness and deployment skills gaps that were identified during the 2012 U&TW. The BERDS course is identified as an advanced course in the STS (Part II, Section A of this CFETP). This course is not required for UGT.

7.4.2.4. Bioenvironmental Engineering Nuclear Enterprise and Radiation (BENER): The BENER course provides training on critical skills necessary to eliminate radiation skills gaps identified in the 2011 Radiation Skills Capability Gap Analysis and the 2012 U&TW. The BENER course has been identified as an advanced course on the STS (Part II, Section A of this CFETP). This course is not required for UGT, however, attendance is required within six (6) months of assignment as either a primary or an alternate AF Radiation Assessment Team (AFRAT) UTC member.

7.5. Proficiency Training. BE Total Force must be fully capable of performing mission critical tasks in support of expeditionary operations and the BE career field needs a critical skills sustainment framework that better supports common operating practices and proficiency training expectation. As such, 3rd Party certifications were voted in on all core tasks and use of AFQTP mandated. More proficiency training is needed with a standard required level of performance within the constraints of competing demands for a BEF's time. Budget and time constrain any skills sustainment framework. The fiscal forecast is that budgets will shrink across the FY16-19 Future Years Defense Program and program managers will seek ways to cut costs. Historically, the TDY for training budget is one the first funding lines to be decremented. Therefore, representatives agreed to priority focus on central development of standardized supplemental training tools that include the right balance of OJT, proficiency training, continuation training, as well as certification via participation in USAFSAM Proficiency Analysis Testing (PAT) to maintain currency/qualification in special tasks and positions is required. This preserves the ability to conduct training and refresher training by a sequestered force and allows apportionment of limited training dollars towards a limited number of mission critical formal and advanced training courses. This resourcing strategy reinforces flight leader accountability for supplemental training while defending formal courses necessary for training that cannot be accomplished at an air base.

8. CCAF. CCAF is one of several federally chartered degree-granting institutions; however, it is the only 2-year institution exclusively serving military enlisted personnel serving in specific AF occupational specialties. The college is the largest multi-campus community college in the world and is regionally accredited through Air University (AU) by the Commission on Colleges of the Southern Association of Colleges and Schools (SACS) to award AAS degrees. Upon completion of basic military training (BMT) and assignment to an AF career field, all enlisted personnel are automatically registered in a CCAF degree program and are afforded the opportunity to obtain an AAS degree. In order to be awarded, degree requirements must be successfully completed before the student separates from the AF, retires, or is commissioned as an officer. See the CCAF website for details regarding the AAS degree programs at <http://www.au.af.mil/au/barnes/ccaf/>.

8.1. CCAF Degree Requirements. Prior to completing an associate degree, the 5-skill level must be awarded and the following requirements must be met:

	<u>Semester Hours (SHs)</u>
Technical Education.....	24
Leadership, Management, and Military Studies	6
Physical Education.....	4
General Education.....	15
Program Elective.....	15
	Total: 64

8.1.1. Technical Education. As of the publication date of this CFETP, CCAF awards 24 SHs for successful completion of the BEA course:

Degree Requirements

Occupational Specialty 4B0X1

Technical Education

(24 SHs) A minimum of 12 SHs of technical core subjects or courses must be applied and the remaining SHs applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified SH values in any subject or course must be approved in advance. Visit the AU's website at: <http://www.au.af.mil/au/index.asp> for more information.

Technical Core

Max SHs

Subjects/Courses

Bioenvironmental Protection	8
CCAF Internship	18
Disaster Medicine	9
Introduction to Bioenvironmental Sciences	9
Occupational Environment	6
Occupational Health & Safety Technologist Certification	12
Radiation Health Physics	4
Waste Management	8

Technical Electives

Max SHs

Computer Science	6
General Biology	8
General Chemistry	8
Hearing Conservation	4
Occupational Health Measurements	6
Microbiology	8
Principles of Ecology	3
Radiological Hazards	4
Statistics	3
Survey of Nuclear Medicine Safety and Procedures	6

8.1.2. Leadership, Management, and Military Studies (LMMS) (6 SHs): EPME and/or civilian management courses (accepted in transfer and/or by testing credit i.e. CLEP/DANTES).

8.1.3. Physical Education (4 SHs): This requirement is satisfied by completion of BMT.

8.1.4. General Education (15 SHs): Applicable courses must meet the criteria for application of courses to the General Education Requirements (GER) and be in agreement with the definitions of applicable General Education subjects/courses as provided in the CCAF General Catalog:

<u>Subject/Courses</u>	<u>SHs</u>
Oral Communication	3
Speech	
Written Communication	3
English Composition	
Mathematics	3
Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement-if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics.	
Social Science	3
Anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology	
Humanities	3
Fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy, religion	

8.1.5. Program Elective (15 SHs): Satisfied with applicable Technical Education; LMMS; or General Education subjects/courses, including natural science courses meeting GER application criteria. A maximum of nine (9) SHs of CCAF degree applicable technical credit otherwise not applicable to the program of enrollment may be applied. See the CCAF General Catalog for details regarding the AAS for this specialty. **NOTE:** Foreign language credit earned at Defense Language Institute or through the Defense Language Proficiency Test; maximum six (6) SHs of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment.

8.1.6 Residency Requirement (16 SHs): Satisfied by credit earned for coursework completed in an affiliated school or through internship credit awarded for progression in an AF occupation specialty. Enlisted members attending Army, Navy, and/or DoD initial or advanced training do not receive resident credit since these schools are not part of the CCAF system, however, the college awards proficiency credit to AF enlisted members completing these courses. **NOTE:** Physical education credit awarded for BMT not resident credit.

8.2. Professional Certifications. Certifications assist the professional development of our Airmen by broadening their knowledge and skills. Additionally, specific certifications may award collegiate credit by CCAF and civilian colleges, saving time and AF tuition assistance (TA) funds. It also helps Airmen to better prepare for transition to civilian life.

To learn more about professional certifications and certification programs offered by CCAF, visit <http://www.au.af.mil/au/barnes/ccaf/certifications.asp>. In addition to its associate degree program, CCAF offers the following certification programs and resources:

8.2.1. CCAF Instructor Certification (CIC) Program. CCAF offers the three-tiered CIC Program for qualified instructors teaching at CCAF affiliated schools who have demonstrated a high level of professional accomplishment. The CIC is a professional credential that recognizes the instructor's extensive faculty development training, education and qualification required to teach a CCAF course, and formally acknowledges the instructor's practical teaching experience.

8.2.2. CCAF Instructional System Development (ISD) Certification Program. CCAF offers the ISD Certification Program for qualified curriculum developers and managers who are formally assigned at CCAF affiliated schools to develop and manage CCAF collegiate courses. The ISD Certification is a professional credential that recognizes the curriculum developer's or manager's extensive training, education, qualifications and experience required to develop and manage CCAF courses. The certification also recognizes the individual's ISD qualifications and experience in planning, developing, implementing and managing instructional systems.

8.2.2.1. Vectored Airmen candidates selected for a DSD assignment as an AFSC Instructor (TB0X1) must possess, as a minimum, a CCAF AAS degree in BE Technology or they must be actively pursuing and be within 1 year (i.e. 12 SHs) of completion. A degreed USAFSAM faculty is necessary in order to maintain accreditation through the SACS.

8.2.3. CCAF Professional Manager Certification (PMC). CCAF offers the PMC Program for qualified AF NCOs. The PMC is a professional credential awarded by CCAF that formally recognizes an individual's advanced level of education and experience in leadership and management, as well as professional accomplishments. The program provides a structured professional development track that supplements the EPME and CFETP.

8.2.4. AF Credentialing Opportunities On-Line (COOL). The AF COOL program replaced the CCAF Credentialing and Education Research Tool (CERT). The AF COOL provides a research tool designed to increase an Airman's awareness of national professional credentialing and CCAF education opportunities available for all AF occupational specialties. The AF COOL also provides information on specific occupational specialties, civilian occupational equivalencies, CCAF degree programs, AFSC-related national professional credentials, credentialing agencies, and professional organizations. The AF COOL contains a variety of information about credentialing and licensing and can be used to assist Airmen to:

8.2.4.1. Get background information about civilian licensure and certification in general and specific information on individual credentials including eligibility requirements and resources to prepare for an exam.

8.2.4.2. Identify licenses and certifications relevant to a particular AFSC.

8.2.4.3. Fill gaps between AF training/experience & civilian credentialing requirements.

8.2.4.4. Acquire information on funding opportunities to pay for credentialing exams and fees.

8.2.4.5. Learn about available resources that can help acquire civilian job credentials.

8.2.5. AFI 41-104, Professional Board and National Certification Examinations. Implements AFI 41-1, *Health Care Programs and Resources*, and provides requirements and procedures for applying to take professional board or national certification examinations for medical enlisted personnel. Specialty certifications that require periodic recertification examinations with annual educational curricula as part of the recertification process, during the interval between examinations, may be reimbursed associated costs and expenses. It is important to check the AFI and local policies prior to committing to and incurring any costs. Finally, some certifications require the payment of

annual or recurring membership fees which may be the sole responsibility of the member to pay. It is critical to make informed decisions about certification examinations and their requirements.

8.2.5.1. The following list provides the current and approved certifying agencies for 4B0X1 enlisted members. The list is maintained in the [AFMS Knowledge Exchange \(Kx\)](https://kx2.afms.mil/kj/kx5/AFMedicalCorps/Pages/AFI-41-104-List-of-Certifying-Agencies.aspx) at: <https://kx2.afms.mil/kj/kx5/AFMedicalCorps/Pages/AFI-41-104-List-of-Certifying-Agencies.aspx>. The list is also referenced in AFI 41-104, the source document for AFMS national certifications and examinations for medical enlisted personnel.

Table 1. BE Approved Certifying Agencies

BE Approved Certifying Agencies	
Certifying Agency	Certification/Examination Title
American Board of Industrial Hygiene (ABIH)	Certified Industrial Hygienist (CIH)
ABIH	Occupational Health and Safety Technologist (OHST)
Board of Certified Safety Professionals	Certified Safety Professional (CSP)
National Registry of Radiation Protection Technologists	Nationally Registered Radiation Protection Technologist
National Registry of Environmental Professionals	Registered Environmental Manager (REM)
National Fire Protection Association (NFPA)	*HAZMAT Operations Certification

NOTE: Asterisk (*) identifies those certification required for an AFSC or duty position.

8.3. Other Certifications. A variety of State level certifications exist in areas such as asbestos, lead based paint and drinking water analysis. Some certifications are Federal or State requirements governing the certification of BE personnel and certain operator functions.

8.4. Off-Duty Education/Undergraduate and Graduate Degree Programs. Additional off-duty education is a personal choice for all qualifying Airmen. The AF is committed to education and offers a number of financial assistance programs to help our Airmen at all levels with education. After earning a CCAF AAS Degree in BE Technology, both Airmen and the AF benefit when enlisted members pursue relevant undergraduate degrees in approved civilian universities during off-duty time. Establishing an individual transition plan (ITP) for the enlistment period for developmental education is advised. Doing so creates a career-ready military and provides service members, from the start of their military careers, a *continuous* opportunity to prepare for career readiness success. For more information on the various enlisted education benefits and enlisted commissioning programs available in the USAF, visit the official USAF website, specifically review the ‘Enlisted Education’ section located at: <http://www.airforce.com/benefits/enlisted-education/>

8.4.1. Education - ITP. The ITP is the framework for success in any education objective and goal. Framework planning to set and achieve realistic educational goals based upon individual need, helps provide the clear map of the transitional milestones that occur while serving in and beyond a tour of duty in the USAF. In doing this, individual actions and activities associated with the ITP become clearly organized and individuals are more capable to visualize and associate activities into manageable and achievable tasks and milestones. When the educational aspects of an ITP are created, proactive and productive modification may occur at any time in response to change in circumstance. In addition, supervisors, mentors/sponsors and counselors are better able to support achievement of goals with the information required to assist and knowledge empower individuals to make informed decisions. Find out more information from local A&FRC and Base Education Offices. Assistance is available through college education counselors and by attending the Transition Goals, Plans, Success (GPS) Education Workshop hosted on most AF or JB locations, or accessed/taken on-line via the “Accessing Higher Education Course” designed to guide individuals through the variety of decisions involved in choosing a degree completion program, college

institution, and funding, as well as completing the admissions process. After completing this program, individuals will be prepared to develop a customized plan for a successful transition to a higher education institution. (URL: <http://jko.jten.mil/courses/tap/TGPS%20Standalone%20Training/start.html>)

8.4.2. Relevant BE Undergraduate Programs. In addition to the CCAF program, BE Airmen may pursue opportunities to use their TA benefit towards earning an undergraduate or graduate degree through a civilian university. Universities offer a variety of degree programs and sometimes finding a degree program relevant to the BE career field may be challenging. Relevant degree programs in Biology, Industrial Hygiene, Chemistry, Physics, Health Physics, and Engineering may be used for 4B0-to-43E requirements while engineering sciences, engineering technology, and homeland defense are useful to further developmental education related to the BE career field. When selecting a degree program, it is important to know the accreditation for which the college or university has been awarded. Accreditation assures quality based on a defined nationally endorsed standard or guidelines. In turn, accreditation makes it more likely the curriculum will assist graduates' preparedness to enter into (or advance) in the profession of choice. However, it is not a guarantee for transferring credits, achieving dreams, finding a great post military service job, or making lots of money (though some or all of these things may happen). For core educational requirements in math and science, taking courses with laboratories offered at local brick-and-mortar universities should be used and then the remaining education may be accomplished through on-line or hybrid studies.

8.4.3. Accreditation Board for Engineering and Technology (ABET). ABET is a nonprofit, non-governmental organization that accredits college and university programs in the disciplines of applied science, computing, engineering, and engineering technology. ABET is recognized by the Council for Higher Education Accreditation (CHEA) and is valued in the BE profession; as well as valued as a requirement in meeting academic standards for '4B0-to 43E Accession Program' candidacy/consideration. ABET accredits programs at many levels; therefore, look for programs at the full engineering (Engineering Accreditation Commission) level not the technology, computing or applied science level. When researching engineering degrees, most of the program titles end in the word 'engineering.' **NOTE:** To search accredited programs meeting the ABET Accreditation Criteria that are in effect at the time of specified review, visit the www.abet.org site or specifically search the ABET Accredited Search tool option located at: <http://main.abet.org/aps/Accreditedprogramsearch.aspx>.

8.5. Enlisted-to-AF Institute of Technology (AFIT) (E2A) Program. The E2A program is a unique element of enlisted professional development. In conjunction with other training and education programs, resident AF Institute of Technology (AFIT)-sponsored science, engineering, and management graduate degree opportunities further develop a NCO's technical education and skills. Ultimately, this program provides enhanced combat capability for diverse career fields with positions requiring a higher degree of education. This opportunity is one of many that comprise deliberate force development, and therefore members should expect a permanent change of station (PCS) upon graduation to fill duty positions coded for the respective advanced academic degree. Post-graduation duty assignments are directed through the AFPC/DPAA, and AFPC/DPAO FMs in coordination with AFCFMs.

8.5.1. BE personnel may be academically eligible to apply for admission to one of three graduate programs offered by the Graduate School of Engineering and Management at the AFIT (AFIT/EN): Combating Weapons of Mass Destruction, Environmental Engineering and Science, or Industrial Hygiene.

8.5.2. The E2A selection board typically convenes in the month of February, and academic year application deadlines and milestones are centered around that date. In general, interested applicants are advised to seek counsel and to work with supervisors, mentors, and academic advisors to coordinate and to submit completed admission package requirements in anticipation of submission deadlines. Selections are based on the member's record as well as the return on investment for the AF.

8.5.3. Interested applicants are encouraged to visit the AFIT/EN website at www.afit.edu/en/admission or contact an admissions counselor at: <http://www.afit.edu/en/admissions/contact.cfm?contact=admissions> or DSN 785-6234 extension 3184 for assistance. In addition, 4B0X1s may contact the two (2) AFIT School of Engineering and Management professors by dialing (937) 255-3636, option 4 for "Departments", then option 3 for the Department of Systems and Engineering Management (ENV). Ask for the Director of the degree program being considered or by web <http://www.afit.edu/ENV/>. BE AFIT Faculty AF biographies can be accessed here on the [BE Functional area](#) of the AF Portal: <https://www.my.af.mil/gcss-af/USAF/ep/browse.do?programId=t88B4F00B42E99C6901437CA4EA360A70&channelPageId=s2D8EB9D6408E0AD001414B3FCEDF1549>

8.6. 4B0-to-43E Accession Program. The 4B0-to-43E Accession Program offers active duty (AD) BE enlisted personnel the opportunity to apply for a commission as an AF BE Officer. Applications are accepted when there are available accession quotas and the applicant competes favorably with individual academic, experience, and performance records plus the requirements for application submission and consideration for the BE accession board are met.

8.6.1. Air Force Officer Classification Directory (AFOCD) Qualification Requirements. Obtain the official specialty description details about this career field, the minimum mandatory qualifications of personnel filling the BE officer specialty requirements, and general accession guidelines for Biomedical Service Corp (BSC) officers, which are based on age and medical fitness, in the AFOCD. The AFOCD is accessible through the "myPers" website on the AF Portal at: https://gum-crm.csd.disa.mil/app/answers/detail/a_id/7759/kw/AFOCD/p/8%2C9.

8.6.2. Academic Requirements. The following requirement must be met at time of application:

8.6.2.1. Must possess an AAS Degree in BE Technology from CCAF. (Not Waiverable)

8.6.2.2. Must possess an ABET accredited Masters of Science degree from AFIT under the E2A program or a BS degree specified below:

8.6.2.3. Must meet AFOCD degree requirements. If individual does not meet the AFOCD degree requirements, must possess a BS degree in Chemistry, Physics, Health Physics, Biology, or Industrial Hygiene from an accredited institution recognized under a program recognized by the CHEA. Undergraduate degrees will only be considered if they are related to BE sciences, or other related qualifying degree containing at least 40 SHs of math and science. (Not Waiverable)

8.6.2.3.1. Science classes must include (at a minimum) five (5) SHs of each of the following: Chemistry (with lab), Biology (with lab), Advanced Biology (with lab), and Physics I and II (with lab). Math classes must include (at a minimum) Calculus I and Statistics. Other math and science classes will be evaluated to meet the 40 SH requirement. Other recommended classes include: Analytic Geometry; Calculus II and III; Elementary Linear Algebra; Elementary Differential Equations; Human Anatomy; Human Physiology; Geology; various Chemistry courses (organic, inorganic, etc), nuclear physics, mechanics of materials, statics, or dynamics.

8.6.3. Experience. A minimum of 7-skill level in 4B0X1 and at least 7 years AD experience in BE is required. (Not Waiverable)

8.6.4. Approval Authority: The BE Associate Corp Chief is the final approval authority for accessions under the 4B0-to-43E Accessions Program. Applicants are encouraged to provide ‘a letter of intent’ in advance to initiating program of study for individual transitional planning for successful 4B0-to-43E Accession Program application. Route letter of intent through respective MFM to the 4B0X1 AFCFM and the BE Associate Corp Chief detailing planned coursework and degree for prior approval/verification the plan meets the academic portion of application standards for successful consideration. Once the course of study is complete, the applicant follows the BSC commission application guidelines as detailed and provided under [BSC Education and Utilization Kx webpage](https://kx2.afms.mil/kj/kx4/AFBSCUtilization/Pages/home.aspx) (<https://kx2.afms.mil/kj/kx4/AFBSCUtilization/Pages/home.aspx>) or by contacting AFPC directly at (210) 565-2775 (DSN 665) or by email at afpc.dpanw@us.af.mil.

8.7. The Language Enabled Airman Program (LEAP). The LEAP is a career-spanning program to sustain, enhance and utilize the existing language skills of general purpose force Airmen. The objective of LEAP is cross-culturally competent leaders across all AF specialties with working level foreign language proficiency – leaders that can meet AF global mission requirements. LEAP is a volunteer program open to officers and enlisted Airmen in most AFSCs. To become a participant in LEAP, Airmen must already possess moderate to high levels of proficiency in a foreign language specified on the AF Strategic Language List. LEAP is managed by the Air Force Culture and Language Center, part of AU’s Spaatz Center at Maxwell AFB, AL. For more information, visit www.culture.af.mil.

8.7.1. International Health Specialist (IHS). Teaming with the IHS professionals fits well with the BE occupation given our broad spectrum of joint health risk management (JHRM) capabilities delivered in global occupational, environmental, radiological and nuclear as well as emergency and deployed operating spaces. The IHS experience strengthens individual institutional competencies, BE occupational competencies and makes both the unit and individual a global asset that may be leveraged when needed. BE craftsman who possess the highest level of demonstrated proficiency and mastery of the occupational and institutionally- valued competencies, and who possess foreign language and cultural communication skills make excellent candidates to support this diverse and challenging global health engagement opportunity. The IHS works closely with U.S. embassy personnel to coordinate U.S. military support, interagency HADR and health care infrastructure development. Additional opportunities exist to broaden experiences through the IHS professional program through the defense attaché, courier, and embassy SDI positions.

8.8. Air Force Virtual Education Center (AFVEC). Airmen may access multiple CCAF self-service options via the AFVEC application on the AF Portal or via the [AU CCAF website](http://www.au.af.mil/au/ccaf/catalog/2008cat/deg_req_two.htm) at http://www.au.af.mil/au/ccaf/catalog/2008cat/deg_req_two.htm or refer to the CCAF General Catalog for specific degree requirements.

8.9. Base Education Office. In addition to serving as the point of contact for distance learning (DL) and as the focal point for the CCAF and AU’s Associate-to-Baccalaureate Cooperative, the Base Education Office assists members obtaining transcripts from other colleges and junior colleges for submission to the CCAF. Counseling is provided to members on classes that are required to receive CCAF degree, as well as counseling on professional certifications. Please visit the Base Education Office for education questions and serve as a liaison to education.

9. Career Field Path. Table 2 generally summarizes and depicts the enlisted career path training required for each skill level and function within this specialty.

Table 2. Enlisted Career Path










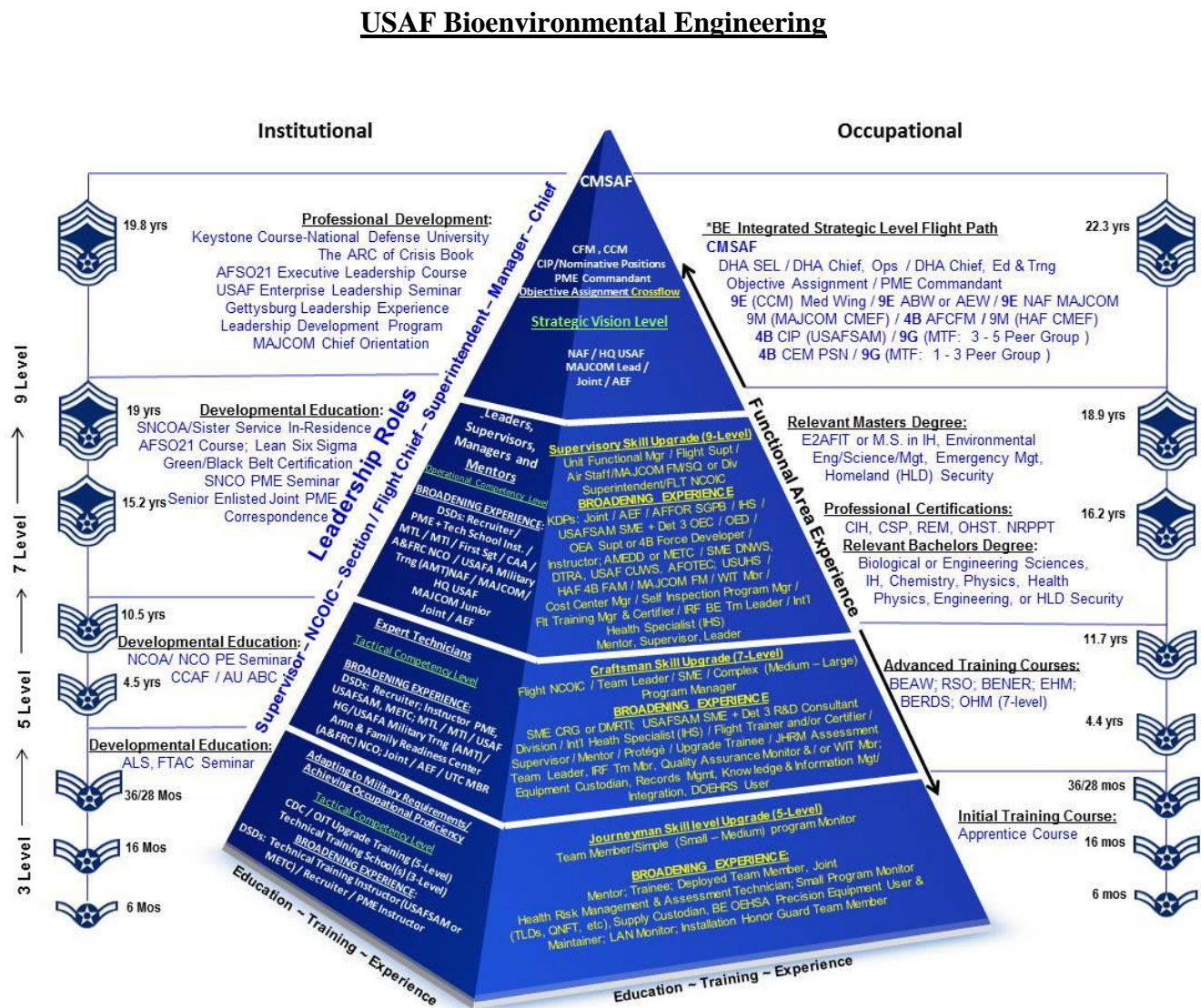
Education and Training Requirements	GRADE REQUIREMENTS			
	Rank	Average Promotion	Earliest Promotion	High Year Tenure
BMT				
Apprentice Technical School (3-Skill Level)		6 months 10 months		
Upgrade To Journeyman (5-Skill Level) - Minimum 12 months in UGT - 9 months for retrainees - Complete 4B051 CDCs - Trained/Certified on all core tasks ALS - Must be a SrA with 48 months' Time in Service (TIS) or be a SSgt select - Resident graduation is a prerequisite for SSgt sew-on (AD only)	  	36 months	30 months	8 Years
Trainer/Certifier Requirements	Trainer - Qualified and certified to perform task to be trained. - Must attend AF Training Course and be appointed by Commander - Recommended by supervisor Certifier - Be certified on the tasks to be evaluated - Possess at least the grade of SSgt with 5-skill level or civilian equivalent - Attend AF Training Course and be appointed by Commander - Certifier cannot be same person as trainer			
Upgrade To Craftsman (7-Skill Level) - Minimum rank of SSgt - 12 months UGT - 6 months for retrainees - Complete all core and duty position tasks - Complete In-Resident Occupational Health Management Course		4 years	3 years	15 Years
NCO Academy (NCOA) - Must be a TSgt or TSgt selectee - Resident graduation is a prerequisite for MSgt sew-on (AD Only)	 	11.7 years 16.2 years	5 years 8 years	20 Years 24 Years
USAF Senior NCO Academy (SNCOA) - Must be a SMSgt, SMSgt select, or selected MSgt - Resident graduation is a prerequisite for CMSgt sew-on (AD Only). Upgrade to Superintendent (9-Skill Level) - Minimum rank of SMSgt - Complete Senior Enlisted Joint Professional Military Education - Members can attend, if accepted, comparable sister-service or International Academies/Schools		18.9 years	11 years	26 Years
Upon Selection to CMSgt - Intermediate Executive Skills Course - Other Leadership Courses (i.e. AFSO21 Executive Leadership Course, Keystone Course, The Arc of Crisis book, USAF Enterprise Leadership & Prospective Seminars, Gettysburg Leadership Experience, Leadership Development Program, MAJCOM Chief Orientation)		22.3 years	14 years	30 Years

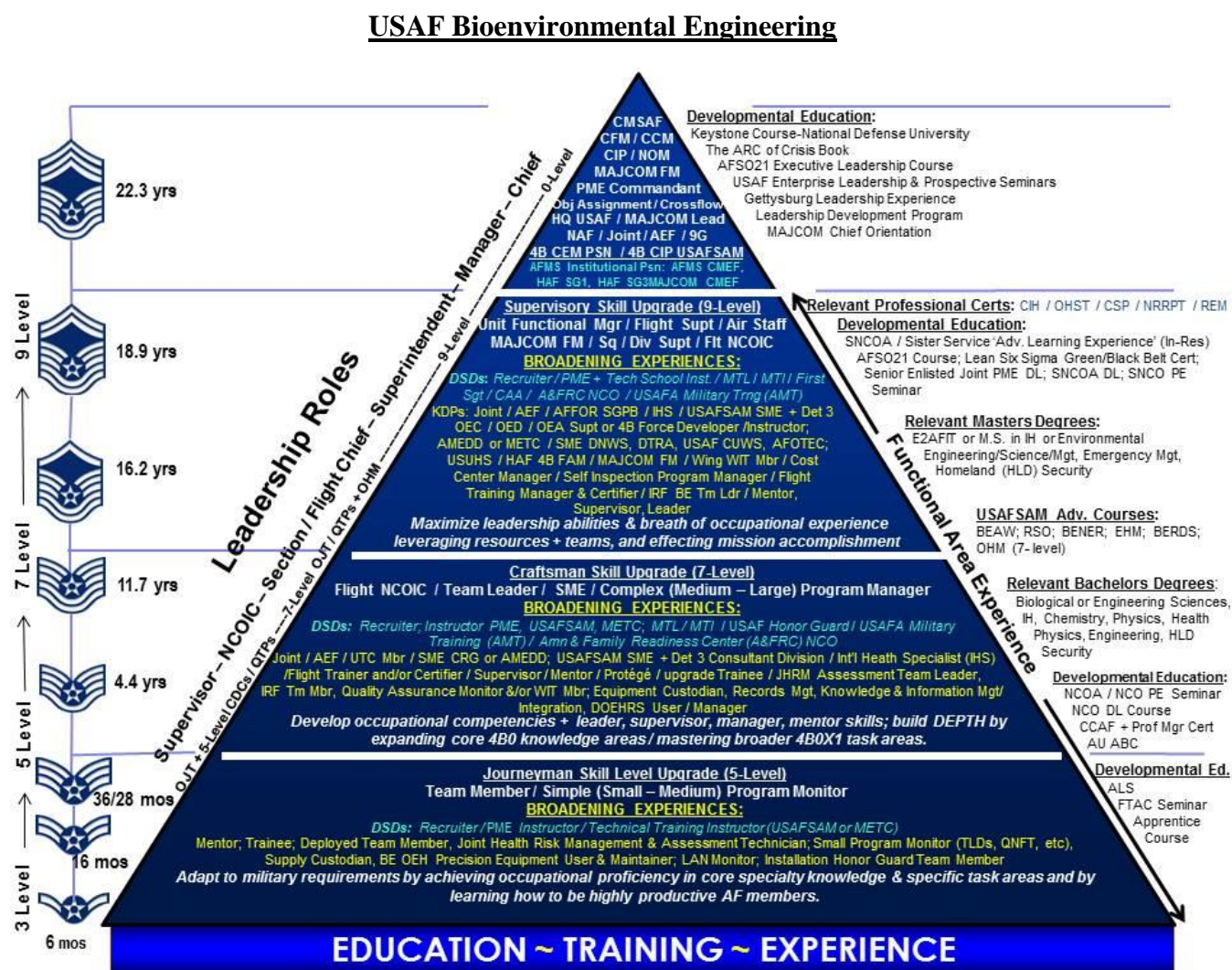
Figure 1. 2D Career Path Pyramid



NOTE: TIS based on Institutional and Occupational 2013 promotion rates.

*BE Integrated Strategic Level Flight Path models the AFMS Flight Path and AFI 36-2618 with respect to institutional positions.

Figure 2. Flat Career Path Pyramid



NOTE: TIS based on AF 2013 promotion rates

9.1. Career Path Tool (CPT). The CPT provides a clear picture of the BE enlisted career field and the key developmental and leadership building opportunities within it such as: core BE functional developmental areas, key BE roles, KLPs/KDPs, and opportunities for progressive movement in the career field and the USAF. Using the CPT, in conjunction with the CFETP and other support tools/resources, empowers the BE enlisted force to identify with current functional roles and/or current institutional roles. Additionally, using the CPT helps Airmen understand how that role fits in the AF, the AFMS, and the career field force development pathway. The CPT assists Airman with establishing individual career readiness goals by helping them understand where they are now versus where they want to be in the future.

9.1.1. The CPT may be used for a variety of purposes. For individual use, these five key steps are suggested as a starting point:

9.1.1.1. Identify current role on the CPT and how role fits in the AF, AFMS, and BE function.

9.1.1.2. Investigate career options and career goals.

9.1.1.3. Identify ultimate career goals, career path, and the knowledge, skills and abilities required to achieve goals.

9.1.1.4. Identify opportunities for development which will provide for career progression.

9.1.1.5. Identify opportunities for development, professional or otherwise.

9.2. The CPT may be accessed here on the AF Portal: <https://www.my.af.mil/gcss-af/USAF/ep/contentView.do?contentType=EDITORIAL&contentId=c2D8EB9D6408E0AD00141846ADD7C1CBD&channelPageId=s6925EC134EE60FB5E044080020E329A9&programId=t2D8EB9D6408E0AD001418465A93F1CBC>

9.3. Mentorship. Mentorship is a critical component of the AF's Force Development construct. Mentorship is normally a relationship in which a person with greater experience and wisdom guides another person to develop both personally and professionally and is designed to prepare Airmen for increased responsibilities.

9.3.1. Mentoring Benefits: There are several benefits to a mentoring relationship, to include receiving further professional career development, enhancing capacity to translate core values and strategies into productive actions, and increasing mastery of the institutional and occupational competencies. Enlisted members are encouraged to engage in building and maintaining a productive relationship with a mentor. A logical choice for a mentor is a supervisor. While the immediate supervisor should be a logical choice for a professional mentor, they may not always be the best one. Should the immediate supervisor not be a good fit, Airmen might instead look for a professional mentor a couple of levels higher up the career ladder. This person may be a BE enlisted, commissioned officer or civilian, or work in a completely different AFSC. If interested in a BE mentor, review the AF biographies of many BE SELs here on the [AF Portal](https://www.my.af.mil/gcss-af/USAF/ep/globalTab.do?channelPageId=s2D8EB9D6408E0AD001414B3FCEDF1549&command=function&parentCategoryId=s2D8EB9D6408E0AD001414B3FCEDF1549) in the [BE Functional Area](https://www.my.af.mil/gcss-af/USAF/ep/globalTab.do?channelPageId=s2D8EB9D6408E0AD001414B3FCEDF1549&command=function&parentCategoryId=s2D8EB9D6408E0AD001414B3FCEDF1549): <https://www.my.af.mil/gcss-af/USAF/ep/globalTab.do?channelPageId=s2D8EB9D6408E0AD001414B3FCEDF1549&command=function&parentCategoryId=s2D8EB9D6408E0AD001414B3FCEDF1549>

9.4. Military Life Cycle Transition Assistance Plan (TAP): The key to a successful transition is career readiness planning, which requires a carefully thought out ITP incorporated into the entire span of a service member's career. In the past, transition and preparation for the civilian workforce occurred late in a service member's time in the military – near the point of separation. Under this new program, these concepts will be incorporated earlier to ensure that the counseling, assessments, and access to resources to build skills or credentials occur at earlier stages of a service member's military tenure. The ITP provides a framework to achieve realistic career goals based upon an assessment of personal and family needs as well as unique skills, knowledge, experience, interests and abilities. Airmen create and maintain their ITP with assistance from supervisors, mentors, and other advisors. The ITP coincides with the Transition GPS outcome-based curriculum and provides a means to discover and explore individual skills and interests which may lead to potential post-transition career paths. The ITP helps Airmen identify critical activities associated with transition and will assist through the process of organizing transition into manageable tasks. The ITP also helps Airmen to establish a timeline for completing all required activities prior to separation – it is a living document and can be modified at any time. The ITP is the individual Airman specific road map for attaining employment, education, technical training, and entrepreneurial objectives and can help make a successful transition to civilian life. To develop a successful career ready ITP, consider the following critical elements depicted in Figure 3 in your planning process:

Figure 3. Military Life Cycle TAP with Career Readiness Standards

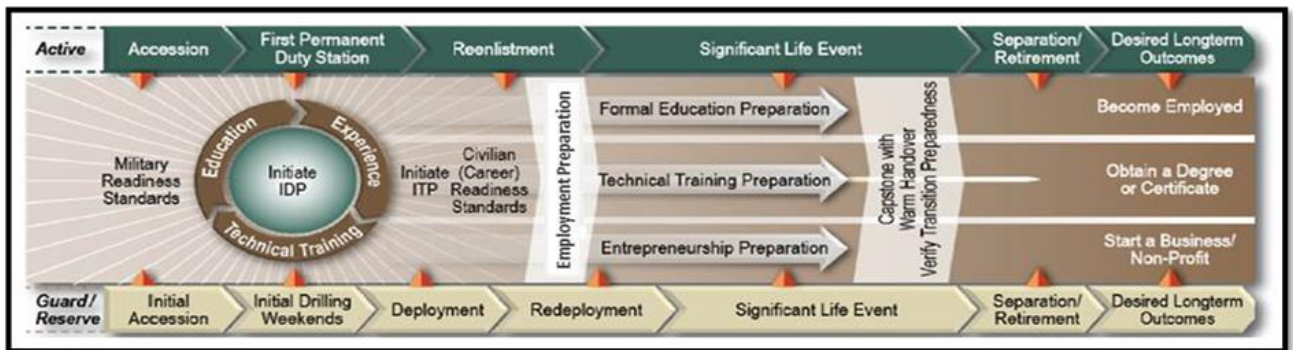
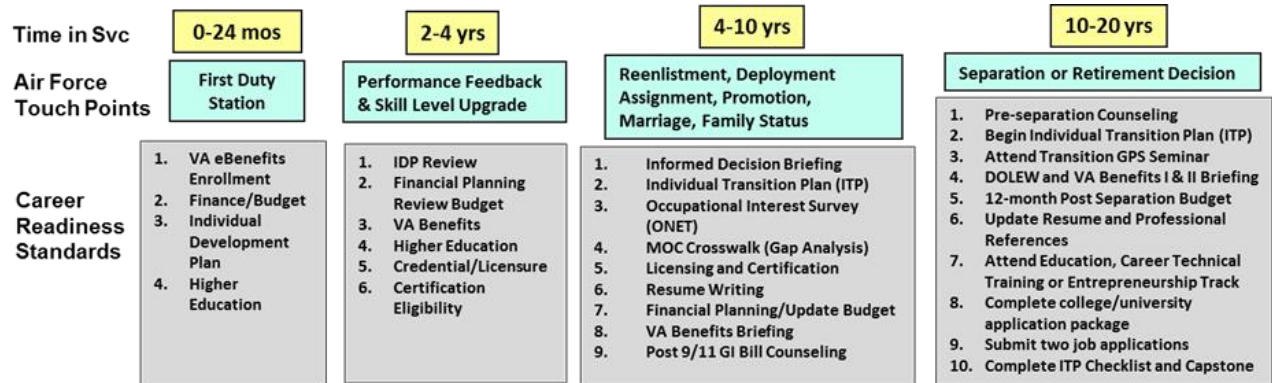
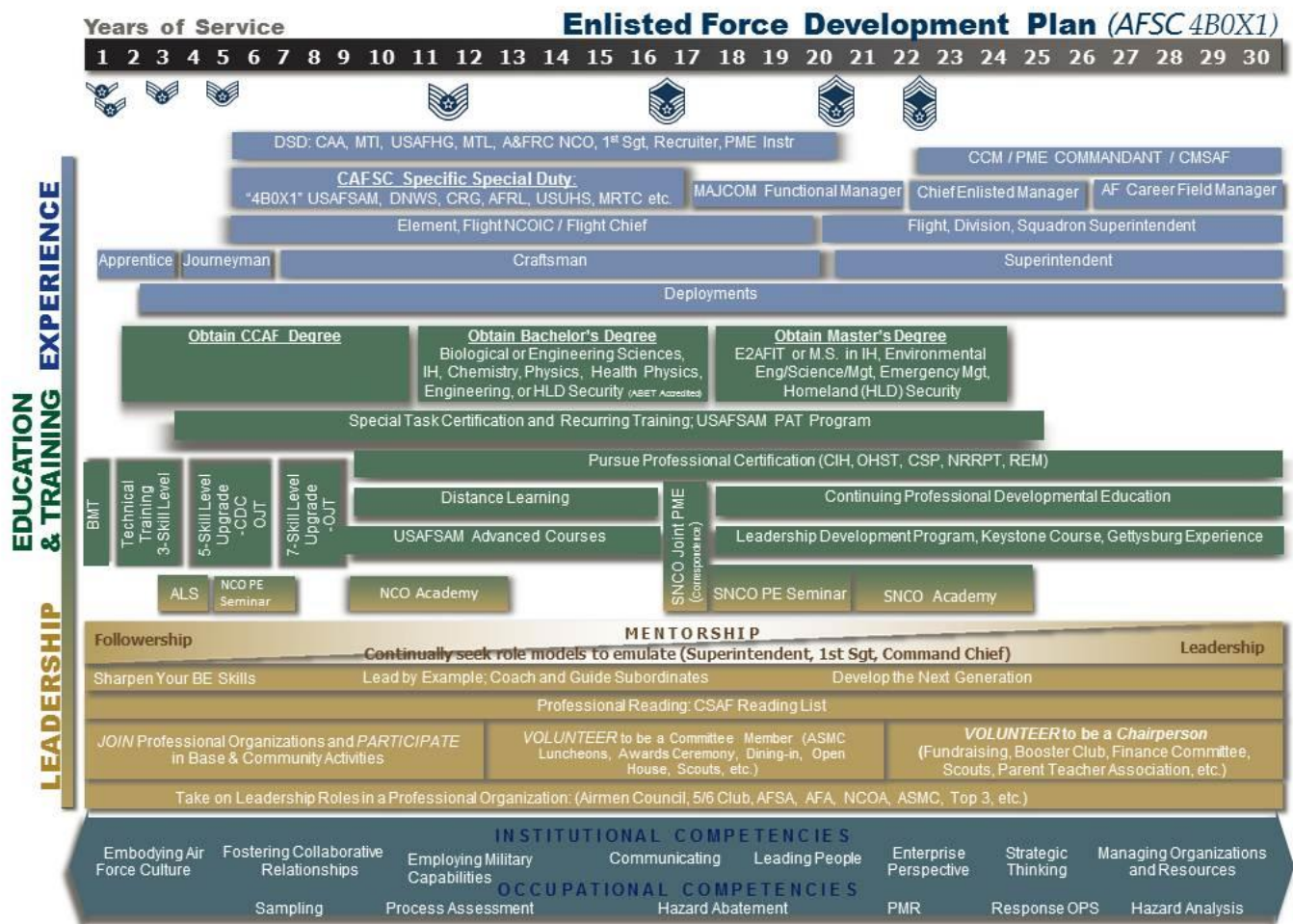


Figure 4. Enlisted Force Development Plan: AFSC 4B0X1. For correlation to the career ready ITP pictured in Figure 3, the following graphic depicts military career progression and succession. Understanding how the two figures relate to ITP are solid discussion points to incorporate into mentorship sessions for both progress and success in and out of the USAF.



10. Occupational Badges. AF members are highly encouraged to wear their current occupational badge on all uniform combinations. After meeting certain criterion, 4B0X1 Airmen are authorized to wear the medical enlisted corp occupational badge. **A maximum of two (2) occupational badges may be worn.** When wearing two (2) occupational badges, wear the one (1) representing the current career field (regardless of level earned) in the top position. **Exception:** Chaplains and aeronautical badges are always worn in the top position when wearing two (2) occupational badges. If authorized, place the second occupational badge in top position and centered ½ inch above the first one. Display the first or sole occupational badge centered ½ inch above the top row of ribbons or above the left pocket if not (reference AFI 36-2903, *Dress and Personal Appearance of Air Force Personnel*).

10.1. Basic – A BEAs wears the basic medical enlisted corp badge after graduating technical school:



10.2. Senior - A BE Craftsman wears the senior medical enlisted corp badge after attaining a 7-skill level:



10.3. Master – A BE Craftsman (must be a MSgt) wears the master medical enlisted corp badge after 5 years in specialty from award of the 7-skill level:



11. Table 3. Manning.

	CMSgt	SMSgt	MSgt	TSgt	SSgt	SrA	Amn	Grand Totals
Authorizations	7	30	85	165	274	203	194	958
Assigned	4	27	83	173	223	206	166	882
%	57	90	98	105	81	101	86	92

NOTE: Manning table reflects authorization data as of January 2015.

Part I, Section C - Skill-Level Training Requirements

12. Purpose. Skill-level training requirements in this career field are defined in terms of tasks and knowledge requirements. This section outlines the specialty qualification requirements for each skill level in broad, general terms and establishes the mandatory requirements for entry, award and retention of each skill level. The specific task and knowledge training requirements are identified in the STS at Part II, Section A of this CFETP.

13. Specialty Qualifications.

13.1. Apprentice Level Training Requirements (4B031)

13.1.1. Apprentice Specialty Qualification (4B031)

4B031 Knowledge
-Basic and applied mathematics, chemistry, physics, computer and information technology, and engineering technology; basic IH, radiological and nuclear health, health physics applications; basic community EH surveillance, drinking water sanitation and surveillance; basic deployed operational health & EH surveillance, and field sanitation; basic OH and medical terminology. -BE aspects of medical readiness.
4B031 Education
-For entry into this specialty, personnel must successfully complete Algebra I, Chemistry, Biology, and English composition in high school. -Desirable: High school courses in Algebra II, Anatomy & Physiology, Physics, and Statistics.
4B031 Training
Completion of the BEA course (B3ABY4B031 003) is mandatory for award of the 3-skill level.
4B031 Experience
None required.
4B031 Other
(NOTE: These 'Other' requirements apply to all 4B0X1 skill levels) -See Part I, Section B, paragraph 8.2.5 , for desired certifications and licenses. -Mandatory for qualifications to remain in this specialty: <ul style="list-style-type: none">• Normal color vision as defined in AFI 48-123, <i>Medical Examinations and Standards</i>.• Ability to wear a 40-pound air pack while carrying 40 pounds of equipment in a totally encapsulating chemical protective suit without exhibiting signs of claustrophobia.• Must possess a valid state driver's license to operate government motor vehicles (GMV) in accordance with AFI 24-301, <i>Vehicle Operations</i>.• A minimum age of 18 years prior to entry into technical training.• Must maintain an AF Network License according to AFI 33-115, Vol 2, <i>Licensing Network Users and Certifying Network Professionals</i>. - See Attachment 4 of the AFECD for additional entry requirements.
4B031 Training Sources and Resources
-Formal initial skills training accomplished through the USAFSAM BEA Course (B3AZY4B031-003) satisfies the knowledge and training requirements specified in the specialty qualification section (above) for award of the 3-skill level. -The STS identifies the tasks and knowledge taught in this course and the proficiency level to

which students are trained.

4B031 Implementation

- Entry into training is accomplished by initial classification or by approved retraining.
- The 3-skill level is awarded upon successful completion of the BEA course.
- Upon first duty assignment arrival, upgrade and job proficiency training begins.
- Position qualification training is initiated anytime an individual is in a specific duty position for which they are not qualified to perform.

13.2. Journeyman Level Training Requirements (4B051): Airmen in UGT are expected to exclusively practice OEH risk surveillance activities to learn and develop through experience in executing task orders that require routine practice with and varied application of equipment in sample analytical planning and related data collection. It is critical that BE journeyman exact standards of performance associated with data collection that is central to informing Force Health Protection decisions and range from sample collection and analysis, quantifying noise, chemical, radiological/nuclear, HF's (ergonomics) levels and associating exposures to humans and the environment.

13.2.1. Journeyman Specialty Qualification (4B051). Qualified on all 4B031 knowledge and task qualification requirements are mandatory. Certification at the journeyman level indicates the 'skilled' capability to carry out a restricted number of work tasks in the BE occupation. Tasks carried out are part of the complete portfolio of work for a 'skilled' 4B071 craftsman, but restricted in scope. The scope is restricted because journeymen operate at a restricted level until they obtain sufficient experience to be fully aware of the implications of their task/work activities and the interdependencies between those work activities and the mission enabling capabilities being supported. Since OJT requirements follow a rank-order proceeding from the simple to the more complicated tasks, focus on learning and doing the required tasks that strengthen, broaden and demonstrate mastering competencies constituting the enterprise skill level for apprentice seeking journeyman skill certification. The 4B0X1 Airman's immediate supervisor manages the member's 5-skill level UGT curriculum to include CDC enrollment, fulfillment of OJT requirements, and continuation plus proficiency training requirements.

13.2.1.1. Journeyman Specialty Qualification (4B051)

4B051 Knowledge

- BE aspects of medical readiness.
- OEH risk assessments.
- IH principles.
- Basic and applied mathematics.
- Nuclear and Radiological health and safety principles.
- Basic chemistry, physics, and computer hardware/software operations desirable.

4B051 Education

- Requirements are the same as for the 3-skill level (listed in paragraph 13.1.1.).

4B051 Training

- The STS (Part II, Section A of this CFETP) identifies all the core tasks required for skill level upgrade qualification and other duty position tasks identified by supervisor.
- Completion of the 4B051 CDC.
- Completion of applicable AFJQSs/AFQTPs.
- Desirable: Training in computer operations, OEH risk assessment and regulating directives.

4B051 Experience

- Verified USAFSAM 4B031 award and associated task knowledge qualifications.
- Broaden and master journeyman technician skills by serving directly under a qualified 4B071 or higher skill level qualified BE member. Typical task assignments at the entry level include, but are not limited to, initially participating as a team member and helper/assistant in all technical tasks of BE program execution requirements. Helper roles increase breadth and depth of experience learning events and enhance the fundamental application and critical thinking skills required to certify foundational core competencies needed to succeed in the 4B0X1 AFSC. Once certified and competent, supervisors expand individual's responsibility to tasks requiring less supervision and oversight.
 - OEH/IH
 - Radiological and Nuclear Health and Safety
 - Water Quality/Sanitation
 - BE Emergency Response Team
 - Activities associated with incidents of natural and manmade disasters.
- Concentration in exposure data collection with routine/non-routine special surveys that are part of larger overarching and full spectrum preventative medicine program areas and OHRM.
 - Execute the Thermo-Luminescent Dosimeter (TLD) program (i.e. exchange, enroll & remove personnel) and monitor results.
 - Conduct Respiratory Protection (RP) Program qualitative & QNFT and training of enrolled members, to include gas masks.
 - Execute sample analytical plans: collect air (breathing zone/ambient air), water, soil and material (bulk/ambient environmental) samples for a variety of contaminants using a variety of field portable, as well as sensitive analytical laboratory instruments.
 - Assess and collect data on physical hazards such as noise, thermal stress, ionizing/EMF/DE radiation, ergonomics and HFs.
 - Assess hazard controls (engineering (industrial ventilation) etc.), personal protective equipment (PPE) (RP, etc.), administrative controls (regulated area controls, etc.).
 - Collect, analyze & record drinking water system samples; maintain drinking water equipment and laboratory standard methods of analysis
 - Prepare field laboratory media+ collection supplies/equipment; pre/post equipment calibration
 - Package & ship samples; maintain chain of custody & regulatory compliant sample registry
 - Record, receive and process sample results; record operating conditions + data measurements.
 - Maintain drinking water laboratories IAW Federal/State/Host Nation Federal Governing Stds
 - Maintain, use, and calibrate precision test equipment such as the HAPSITE, plus the maintain supplies, reagents, calibration gas and sensors associated with each piece of test equipment.
 - Maintain individual knowledge and skill proficiency on precision analytical equipment and direct reading instrumentation (DRI) used in special surveys.
 - Monitor/execute BE Precision Measurement Equipment Laboratory & Medical Equipment Repair Center requirements.
 - Perform informatics & document workplace/community environment conditions/measures; associate data with exposure groups' health risk in the ILER of the DOEHS; contribute to DoD Registries. Document operations (processes, hazards, controls) and workers exposed.
- Conduct incident reporting for locations and workplaces.
 - Field account of what, when, where, and who at the time of the incident.
 - Details of the incident, exposed populations, exposures, and general signs/symptoms
- Participate in readiness and response force activities in the exclusion zone while dressed in the appropriate level of protection. Operate GMVs, LMRs & other readiness response equipment.

4B051 Training Sources and Resources
<ul style="list-style-type: none"> -Completion of the 4B051 CDC. -Completion of all 5-skill level core tasks and duty position tasks. -Completion of all 3rd Party Certification and associated 5-skill level AFQTPs -BE RSV Tool
4B051 Implementation
<ul style="list-style-type: none"> -Entry into 5-skill level UGT occurs post BEA course graduation & upon initial assignment. -Generally, task assignments correlate with subjects studied in individual's CDC studies. -Job proficiency training is initiated anytime an individual is assigned duties that they are not qualified to perform. -Mandatory participation in USAFSAM PAT Program. -Participation in professional social group activities is encouraged. AF BE Portal Groups and Functional Area, BE Linked In, BE Facebook, etc.

13.3. Craftsman Level Training Requirements (4B071): Effective UGT includes both cognitive learning (thinking skills or the attainment of knowledge) and hands-on experience on a variety of tasks under a given skill. For example, performing ventilation surveys could mean anything from completing a simple periodic face velocity or static pressure check to an initial or baseline survey on a complicated multi-duct, multi-hood system with a variety of instruments, including a liquid manometer. A craftsman would be expected to have experience in completing both simple and technically demanding tasks alike.

13.3.1. Craftsman Specialty Qualification. All 4B051 knowledge and task proficiency qualifications; in addition to, certification at the 7-skill level indicates the 'skilled' capability to carry out an unrestricted and full spectrum activities in the BE occupation. The scope of work is unrestricted as a craftsman is in command of the vocational autonomy to assess and to be fully aware of all the implications of their task/work activities in relation to possible interdependencies between different work activities/functions and mission enabling capabilities. OJT requirements follow a progression of skills order, from simple to complex. Since OJT requirements follow a rank-order of proceeding from the simple to the more complicated tasks, focus on learning and doing the required tasks that strengthen and broaden the scope of competencies and constitute an area of skill requirements mastered by journeyman seeking craftsman skill certification.

13.3.1.1. Specialty Qualification (4B071)

4B071 Knowledge
<ul style="list-style-type: none"> -OEH risk assessment, IH, health physics and radiological health principles. -BE administration. -Statistics, microbiology, and elementary anatomy and physiology desirable.
4B071 Education
<ul style="list-style-type: none"> -Completion of college level courses in Algebra, Physics, Biology, and/or Chemistry. -Completion of the CCAF AAS degree in BE Technology.
4B071 Training
<ul style="list-style-type: none"> -The STS (Part II, Section A of this CFETP) identifies all the core tasks required for skill level upgrade qualification and other duty position tasks identified by supervisor. -Completion of applicable AFJQSs/AFQTPs. -Completion of OHM is a mandatory prerequisite (for those entering UGT as of the publication date of this CFETP) to upgrade to the 7-skill level.

4B071 Experience

- Certified qualification in and possession of AFSC 4B051; strong foundational BE competencies gained from full spectrum tactical/operational 4B051 experience; Supervisor, Leader, Mentor, Sponsor & Wingman.
- Element NCOIC/enlisted lead of the four main BE Operational Elements, subordinate program requirements and resources.
 - OEH/IH Elements
 - Radiological and Nuclear Health and Safety Element
 - EH and Water Quality/Sanitation
 - BE MC-CBRN emergency response programs
- Investigate, identify and evaluate CBRN and physical exposures with the potential to affect the health and wellness of employees and the environment.
- Complete OEHSAs to identify and document the potential exposures from the workplace/work site. Perform health based evaluations of requested chemicals/materials and maintain information in the approved OEH-MIS.
- Maintain knowledge and proficiency on all analytical and monitoring equipment. Supervises and provides directions to other 4B031, 4B051 and 4B071 team members.
- Develop Sampling and Analysis Plans. Determines the appropriate collection, preparation & packaging of mission space samples collected, interpret lab results and prepares reports. Provides Quality Assurance/Quality Control (QA/QC) control of other 4B031, 4B051 and 4B071's work.
- Preparation of all correspondence, reports, and charts. Performs data entry as necessary from assessments into the AF-approved OEH-MIS. Provides trainees guidance on the proper informatics.
- Performs routine and special OEH surveys of worksites to identify and evaluate conditions which may be hazardous to workers' health and to recommend measures to eliminate or control those hazards identified. Special Workplace OEH Surveillance includes:
 - Confined spaces
 - RP and training
 - Radiological/Nuclear health and safety
 - Industrial & hospital ventilation systems
 - OSHA expanded standards
 - Workplace reproductive hazards
 - HAZMAT and information management
 - Airborne exposure characterization and associated periodic exposure validation
 - Occupational injury and illness investigations, and
 - Determine HRA severity and formally enter into the AF Risk Assessment Code Program
- Investigates installation worker job-related health concerns, such as
 - Workplace reproductive HRAs for employees, pregnant and breast feeding workers.
 - Occupational illnesses/injuries
 - Environmental differential pay claims
 - Veterans Administration Claims, Congressional Inquiries, Worker's Right-To-Know
- Home Station/Installation Response Force Team and UTC Emergency Response;
 - Responds/assists in "All-Hazards" emergency response actions on base.
 - Utilizing or directing the use of appropriate sampling equipment to provide timely and accurate information as required to members on scene.
 - Contacts and informs all base, AF, and Federal agencies of the situation or requests

<p>further information or guidance as required by the base response plan.</p> <ul style="list-style-type: none"> -Conducts clear, concise and efficient health risk communication to CCs, employees, and occupational workers such as providing technical advice concerning health risks and PPE associated with any chemical or physical agent of concern. <p>Promotes preventive health programs for instructing and motivating managers and employees in the prevention and correction of potential health hazards while supporting the operational mission through ORM.</p> <ul style="list-style-type: none"> -Analyzes progress reports, determines exposure trends, and evaluates program accomplishments in order to coordinate the program properly and to plan for training, special studies, surveys, or indicated corrective action. -Supervise and QA/QC the informatics and documentation of workplace and community environment conditions/measurements and associate data with exposure groups' health risk in the ILER of the DOEHRS and contributes to DoD Registries. Document operations (processes, hazards, controls) and workers exposed. -Participate in Inspections/Assessments; Self-Assessments, Exercise Evaluator, Wing Inspection Team.
4B071 Training Sources and Resources
<ul style="list-style-type: none"> -The STS (Part II, Section A of this CFETP) identifies all the core tasks required for skill level upgrade qualification and other duty position tasks identified by supervisor. -Completion of all 7-skill level core tasks identified in the STS regardless of present duty position. -Any other tasks associated with that duty position as identified by the trainer. -Upgrade and position qualification training are provided by qualified trainers and certifiers. -If qualified trainers and certifiers are not available, requests should be directed to your UTM. -BE RSV Tool
4B071 Implementation
<ul style="list-style-type: none"> - Upgrade training to the 7-skill level starts on the first day of the promotion cycle once selected for promotion to the rank of SSgt; in the case of SSgt retrainees, UGT starts upon award of the 5-skill level. -Mandatory participation in USAFSAM PAT Program. -Job proficiency training is initiated anytime an individual is assigned duties that they are not qualified to perform.

13.4. Superintendent Level Training Requirements (4B091)

13.4.1. Specialty Qualification. All 4B071 knowledge and task proficiency qualifications in addition to the following:

4B091 Knowledge
<ul style="list-style-type: none"> -OEH risk assessments, health physics, and radiological health principles. -Statistics, microbiology, and anatomy and physiology desirable. -AFMS, wing and medical service organizations management/leadership, and experience with PPB&E highly recommended.
4B091 Education
<ul style="list-style-type: none"> -Completion of college level courses in Algebra, Biology, Chemistry, and Physics desirable. -Completion of a BE relevant bachelor and/or master degrees and applicable certifications.

4B091 Training
<ul style="list-style-type: none"> -Completion of all 7-skill level core tasks. -Completion of applicable AFJQSS/AFQTPs.
4B091 Experience
<ul style="list-style-type: none"> -Qualification in and award of AFSC 4B071. -Experienced in leading teams and in conducting, supervising and managing the full range of the occupational and environmental health programs within the BE functional community that are critical and in direct support of delivering the four effects-based mission areas and the six (6) major Aerospace Medicine programs (reference AFD 48-1, <i>Aerospace Medicine Enterprise</i>). -Assigns work to subordinates based on priorities, difficulty of assignments, and the individual Airmen and employee capabilities. -Develops performance standards and rates Airmen and employees; interviews candidates for subordinate positions; recommends, hiring, promotion or reassignments; takes disciplinary measures, such as warnings and reprimands; identifies developmental and training needs of employees; and provides and/or arranges for needed development and training. -Provides a work environment that is free from all forms of discrimination, harassment, and retaliation; addresses subordinates' concerns (perceived or real) and follows up with appropriate action to correct or eliminate tension in the workplace.
4B091 Training Sources and Resources
Completion of formal or recurring advanced training in management, quality improvement, radiological health practices, OEH, and medical readiness is desirable.
4B091 Implementation
<ul style="list-style-type: none"> -The 9-skill level is awarded upon sew-on of SMSgt. -Mandatory participation in USAFSAM PAT Program. -Position qualification training is initiated anytime an individual is assigned duties that they are not qualified to perform.

14. BE Total Force Proficiency Training and Periodic Core Task Certification. Our BE total force development strategy should render sustained individual knowledge and proficiency levels IAW enterprise objective knowledge and performance standards. BE Airmen, whether in-garrison, deployed, or a member of an high performance expeditionary UTC team mission, BE Airman operate in a complex environment with operational team responsibilities and accountability to the career field, AME, AFMS, and the LAF (AFI 36-2640, *Executing Total Force Development*). Training is vital to competence and confidence in proficiently executing core and mission essential tasks (METs) central to BE mission-enabling capabilities. Proficiency training accomplished as specified in this section fills the knowledge and proficiency gaps that build on baseline knowledge or proficiency gained from the initial skills training, OJT, UGT, and position/task qualification training. In BE operational environments, the work “setting” rapidly changes from industrial, environmental, radiological/nuclear, and readiness response/contingency operating spaces. The cross-cutting fundamentals associated with individuals’ competencies and proficiency applying critical knowledge and executing critical tasks in greatly different operational settings remain core. As such, certain core tasks require periodic proficiency recertification and may require a certain level of ‘refresher’/proficiency, and/or continuation training based on locally-determined training needs assessments or the outcome of the standardized recertification.

14.1. Special Task Certification and Recurring Training. The AFCFM-directed special task certification requirements are centralized as home station training (HST) (i.e. in-service training) requirements. The execution of the HST training requirements is decentralized; however, the certification of the 5-, 7- and 9- skill level is expected to be accomplished at the required time and frequency (when specified). Recurring training execution requirements to support the special task certifications are recommended as part of the local annual HST plan. Periodic refresher training and/or continuation training should supplement the HST plans as well as the proficiency and continuation training requirements that develop ready BE enlisted Airman skills and the leadership competencies required for various future operating environments and assignments. Special task certification and recurring training specified in this context is not the sole source of training and certifying on individual's currency, proficiency, and competency. It is not intended to capture all core tasks requirements for 5-, 7- and 9- skill levels nor is the minimum periodic frequency proficiency the maximum allowed by the local leadership team. Therefore, this framework identifies cross-cutting individual tasks critical to mission essential task list (METL) performance requirements, empowers local flight CCs to determine which individual Airman are current based on day-to-day operations assessed against the same proficiency qualification standard outlined in the AFQTPs. The list of task certification and training requirements are not lengthy if the operational concept-to-METL-to-BE readiness skills/knowledge nesting methodology is applied in business as usual in the home station. Smart planning and incorporation of developmental needs into existing requirements at the air base is prudent.

14.1.1. AF IMT 1098. The AFCFM directed requirements are established in the AF IMT 1098s. The AF IMT 1098s are broken down into six categories based on requirements and are listed in the table below. The forms may be found on the [AF Portal BE Functional Area](#).

Table 4. AFCFM-Directed Special Task Certification and Recurring Training

AF IMT 1098:	Established by:	Mandatory for:	Remarks:
BE Equipment Certification	AFCFM	4B051 & 4B071 Total Force	Sets minimum task qualification standard
HAPSITE Recurring Training + Periodic Task Certification	AFCFM	4B051 & 4B071 Total Force	Sets additional randomized core tasks certifications above minimum standard; includes individual proficiency via local level 3rd Party certification
BE MET Operational Requirements	AFCFM	4B051, 4B071 & 4B091 Total Force	Sets additional tasks above minimum standard
BE Pre-Deployment Task Certification	AFCFM	4B0X1 "D" Coded – Tasked Deployers (NLT 120 days prior to deployment)	Sets additional tasks certification and training above minimum and MAJCOM standards
USAFSAM PAT - (Individual-Proficiency Analysis Testing (I-PAT) 3rd Party Certification)	AFCFM	4B051, 4B071 & 4B091 Total Force	Sets additional tasks above minimum standard; includes individual proficiency via USAFSAM 3rd Party Proficiency Analytic Testing certification
AF Radiation Assessment Team Certification	AFCFM	Primary + Alternate 4B0X1 Assigned AFRAT UTC Members	Sets additional tasks certification and training above minimum standards

14.1.2. Certification. The larger overarching and complex matter of defining BE requirements and capabilities and associating the method of validating knowledge and skills with the multiple verification platforms must be addressed and balanced. The continuous system designed for formal

needs assessment is implemented with Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities and foundational to the CoL objectives (AFDD 1-1, *Leadership and Force Development*). Once upgraded to the 5- and the 7- skill levels, BE forces must sustain proficiency and qualifications, as well as continue to deliberately develop for future duty positions. With a combination of engagements in ‘doing’ or ‘practicing’ the tasks that demonstrate proper knowledge, skill proficiency is sustained and kept current and coupled with supplemental training, self-study, and deliberate work assignments based on staff needs assessment, Airmen are deliberately developed for current and new mission requirements at hand. Doing this helps prepare and to develop Airmen with future assignments in mind; whether, the assignment is to replace a departing BE staff member, fulfill an upcoming AEF tasking, or PCS to a different location. As defined in AFI 44-119, “Competency is demonstrated by performance in a designated setting, consistent with established standards of performance that are determined by the work setting and the individual’s role in that setting.” Without a clear standard, the “proficient” or “non-proficient” rating is subjective from evaluator to evaluator and based on evaluator’s knowledge level. To remove variance associated with the evaluator’s standard of performance and what is “proficient” and what is “non-proficient”, each trainer and certifier must utilize the AFQTPs and ensure the standards of performance are upheld. In order to successfully assess individual skill level proficiency in BE, 3rd party task certifications via use of the AFQTPs or via USAFSAM PAT Program participation is required for certain core and MET. In addition to the AFQTP specifications, the 3rd party certifications must be accomplished by and documented in accordance with AFI 36-2201, *Air Force Training Program*, para 6.7.3., “Task Certifier Qualifications and Responsibilities” and documented using the 4B0X1 AFQTP Documentation Record.

14.1.3. Decertification and Recertification: The AFCFM-directed special task certification requirements are designated core tasks from the STS and/or foundational to individual competencies needed in support of UTC METs. When a supervisor determines an Airman is unqualified on a task previously certified for in their duty position, the supervisor deletes certification when using the automated AFTR system. Appropriate remarks pertaining to the reason for decertification are entered on the AF Form 623A, *On-The-Job Training Record Continuation Sheet*, or automated version. Begin recertification (if required) following procedures in AFI 36-2201, paragraph 6.9.6.1.3. Taking a proactive approach, with all parties’ engaged in the AF Training Program, training managers and supervisors support proper staff development and training needs before a 3rd Party Certification is scheduled to occur. Doing this may assist in avoiding unnecessary decertification and may continue to boost the confidence and willingness in members’ competencies to expand to greater challenges.

14.2. BE HST Calendar: A ‘BE HST Calendar’ is posted under the ‘Training’ section of the [AF Portal BE Functional Area](#) along with the accompanying AF IMT 1098s for trainees’, trainers, certifiers, supervisors and training managers’ use. The calendar provides special task requirements contained in Table 3, *AFCFM-Directed Special Task Certification and Recurring Training* (reference CFETP paragraph [14.1.1.](#)) The training resources and currency platforms described are the proficiency training and currency platforms permitted for use to meet skill level standards of proficiency. Actual work done and performance measured IAW AFQTP standards (real world work done, exercise events with recorded/measured objectives, USAFSAM advanced training course, and USAFSAM 3rd Party Certifications obtained via successful advanced training course completion or successful participation in the USAFSAM PAT Program may be accounted for proficiency training and certification in most cases. **NOTE:** Many of the tasks are existing operational requirements that provide BE enlisted Airmen the opportunity to get the mission done while demonstrating and gaining proficiency with proper oversight. Proficiency will be assessed using the respective

AFQTPs for all periodic requirements that are STS listed core tasks or will be accomplished through USAFSAM PAT Program participation.

14.2. BE RSV Tool. This DL course is required for BE enlisted personnel returning from DSD or from serving outside the functional account code (FAC) 5311 for more than 365 days. Course completion is required within 60 days of reintegration into a BE Flight or into 4B0X1 AFSC UMD authorization. The RSV Tool addresses critical knowledge and skills through tailored application based scenarios. The scenarios are designed to examine and to verify proficiency focusing on the individual's currency and proficiency in selected STS line items. When used in this capacity, the tool's results are non-retribution. Feedback from the RSV Tool provides the supervisor with an assessment of an individual's knowledge level, as well as highlights areas requiring proficiency training attention in order to fully and successfully reintegrate Airmen into the role of BE after extended time away from the tasks and work practices. Reference the chart located in Part II, Section C, paragraph [7.7](#) for DL course information.

Part I, Section D - Resource Constraints

15. Purpose. This section identifies known resource constraints that preclude optimal/desired training from being developed or conducted, including information such as cost and manpower. This section also includes narrative explanations of each resource constraint and an impact statement describing what effect each constraint has on training. In addition, this section includes actions required, office of primary responsibility, and target completion dates. Resource constraints will be, as a minimum, reviewed and updated annually.

16. Reporting Job Proficiency Training Constraints - Units/MAJCOMS.

16.1. Supervisors should report known resource constraints, that prevent personnel from completing the mandatory training requirements specified in this plan, to their unit EST manager. The authority for requesting waivers is AFI 36-2101.

16.2. In the report, provide a brief description of the resource constraints which adversely affect the training program and include the impact this constraint has or will have on training. Identify the specific STS line item and task code(s) affected. Also, provide a brief description of the resource needs to resolve the problem, including expenses, the corrective actions taken or to be taken, and the estimated completion date.

16.3. If the constraint may be resolved at the local level, the report will be coordinated with the senior 4B0X1, and if the impact affects unit war skill requirements, the group CC. If the constraint needs MAJCOM support, forward the report through your MDG/CC to the 4B0X1 MFM. Constraints that cannot be resolved at the unit or MAJCOM level, or have a long term estimated completion date, must be forwarded to the 4B0X1 AFCFM as a request for waiver or deferment of CFETP requirements.

Part I, Section E - Transitional Training Guide. There is currently no transition training requirement. This area is reserved.

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL

THOMAS W. TRAVIS
Lieutenant General, USAF, MC, CFC
Surgeon General

Part II, Section A - STS

1. Implementation. This STS is used for technical training provided by the USAFSAM/OED for the initial skills BEA training course, implemented in May 2014, as well as for the USAFSAM BE advanced training courses offered and listed in Table 7.1. Prescribed 5-skill level CDCs plus the 5- and 7-skill level AFQTPs are projected for publishing and implementation in November 2014.

2. Purpose. The STS is a guide for the development of promotion tests used in the WAPS. SKTs are developed at the USAF Occupational Measurement Squadron by SNCOs with extensive practical experience in the career field. The tests sample knowledge of STS subject matter areas judged by test development team members as most appropriate for promotion to higher grades. Questions are based upon study references listed in the [EPRRC](#). Individual responsibilities are detailed in Chapter 1 of AFI 36-2605, *Air Force Military Personnel Testing System*. **NOTE:** WAPS is not applicable to the ANG or Air Force Reserve Command. IAW AFI 36-2201, this STS accomplishes the following:

2.1. Lists Career Field Tasks. Column 1 lists task line number and most common tasks, knowledge, and TRs necessary for Airmen to perform duties in the 4B0X1 3-, 5-, 7-, and 9- skill level specialty, as described in the [AFECD](#) which can be accessed via the [“myPers” website](#): https://gum-crm.csd.disa.mil/app/answers/detail/a_id/7504/p/8,10/c/1363.

2.1.2. Lists Core Tasks. Column 2 identifies Core Tasks for specialty-wide training by either a (5 or 7) for the respective 5- and 7-skill level upgrade trainee. Personnel in UGT to the 5-skill level must be trained and certified on all tasks annotated with a “5”. Personnel in UGT to the 7-skill level must be trained and certified on all tasks annotated with a “7”. Third party certification is required for certification and evaluation of any identified core tasks utilizing corresponding task’s *AFQTPs* located in the “[AF e-Publishing](#)” via the [AF Portal](#). In addition to the AFQTP specifications, the third-party certifications must be accomplished by and documented in accordance with AFI 36-2201, paragraph 6.7.3., “Task Certifier Qualifications and Responsibilities” and documented using the 4B0X1 AFQTP Documentation Record.

2.1.3. Lists Wartime Tasks. Column 2 also identifies AFSC specific contingency/wartime tasks with a “W” annotation. Wartime tasks for the 5-, 7-, and 9- skill level indicate independent critical occupational knowledge and performance skills required to employ UTC’s war-fighting METLs. The UTC METLs are critical tasks needed to deliver capabilities for combatant CCs to win the fight in contingency/wartime operating spaces. The wartime tasks are identified by an analysis of the METLs associated with common BE UTCs (i.e. Prevention and Aerospace Medicine, Global Reach Laydown, Medical Nuclear Biological, Chemical Team, Special Operations Forces, Medical Augmentation, and AFRAT). Individual wartime tasks essential to the success of the war-fighting mission are considered as “critical tasks.” Those critical tasks further identified as unique to the deployed environment (i.e. no garrison equivalent or conducted differently), not covered in approved supplemental training platforms, and/or highly valued skills that are perishable if not practiced as employed to meet combatant commander support requirements are identified in the AF IMT 1098. Supervisors use the series of AF IMT 1098 provided in AFTR to document selected tasks requiring recurring training or evaluation at the minimum frequency specified by this CFETP. The MAJCOM directives or local directives may identify additional tasks contained in the CFETP requiring special certification, recurring training, or evaluation. This form may be overprinted and filed in the AF Form 623, *Individual Training Record Folder*. For tasks requiring certification this form should remain in the training record until superseded or no longer required.

2.4. Provides Certification for OJT. Columns 3A through E provide space for documenting the initiation and completion of UGT.

2.5. Shows Formal Training and Correspondence Course Requirements. Qualitative requirements are described on page 54 which provides an area for [trainee identification](#) and a description of the [AF Proficiency Code Key](#).

2.5.1. 3-Level Course Requirements. Column 4A shows the task/subject knowledge and task performance proficiency levels attendees of the BEA Course will be trained in. Graduates of the course are expected to perform the tasks and have the subject knowledge to the proficiency listed in the STS.

2.5.2. 5-Level OJT Requirements. Column 4B shows task performance proficiency levels individuals in 5-level OJT are expected to achieve and perform.

2.5.3. 5-Level CDC Requirements. Column 4B shows the task/subject knowledge proficiency levels graduates of the 4B0X1 Journeyman (4B051) CDC will be trained to. Graduates of the course are expected to have the subject/task knowledge to the proficiency level listed in the STS.

2.5.4. 7-Level OJT Requirements. Column 4C shows the task/subject knowledge levels and task performance proficiency levels individuals in 7-level OJT are expected to achieve and perform.

2.5.5. Advanced Technical Course Requirements. Column 4D shows the task/subject knowledge levels and task performance proficiency levels attendees of 4B0X1 advanced technical courses will be trained in. USAFSAM provides graduates of advanced technical courses with a training report indicating by line item which task/subject knowledge and task performance proficiency levels were taught. Advanced course graduates are expected to perform the tasks and have task/subject knowledge at the proficiency levels listed in the STS.

2.6. Qualitative Requirements. Page 54 contains the [proficiency code key](#) used to indicate the level of subject/task knowledge and task performance level provided by in-residence training, CDCs, and OJT.

2.7. AFJQS. Used for OJT when placed in the Enlisted Training and Competency Folder and used according to AFI 36-2201. When used as a AFJQS, the following requirements apply:

2.7.1. Documentation. Training documentation will be accomplished in AFTR accessible from the AF Portal via the Advanced Distributed Learning System (ADLS). As a minimum, complete the following columns in Part II of the CFETP: Start Date, Complete Date, Trainee's Initials, and Trainer's Initials. An AFJQS may be used in lieu of Part II of the CFETP only upon approval of the 4B0X1 AFCFM. **NOTE:** The 4B0X1 AFCFM may supplement these minimum documentation procedures as needed or deemed necessary for the AFS.

2.8. EPRRC. Specialty Knowledge Tests (SKTs) are developed at the Air Education & Training Command (AETC) Airman Advancement Division by SNCO SMEs with extensive practical experience in their AFS. The SKT portion of the samples knowledge of the STS subject matter areas judged to be most appropriate for promotion to higher grades. Questions are based upon study references listed in the most current EPRRC located on the [AF Portal](#) (URL: <http://cdc.aetc.af.mil/apex/f?p=300:9:316441373675226>). Individual responsibilities are in Chapter 1 of AFI 36-2605.

3. Recommendations. Submit notice of STS errors and recommended STS improvements and corrections to the 4B0X1 AFSC Training Manager at USAFSAM/OED Bldg 840, Room E308, WPAFB, OH 45433 or call (937) 938-3366 (DSN 798). At a minimum, compiled submissions will reference the specific STS paragraph or line item, discrepancy and possible corrective action. Recommendations are reported quarterly to the MAJCOMs and AFMSA BE staff, for situational awareness of suggested course of actions and/or actions taken to remedy. To contact USAFSAM/OED electronically, send email to: usafsam.oe.workflow@us.af.mil.

This Block Is For Identification Purposes Only		
Name Of Trainee		
Printed Name (<i>Last, First, Middle Initial</i>)	Initials (Written)	Last 4 SSAN
Printed Name Of Certifying Official And Written Initials		
<i>N/I</i>	<i>N/I</i>	
<i>N/I</i>	<i>N/I</i>	
<i>N/I</i>	<i>N/I</i>	
<i>N/I</i>	<i>N/I</i>	
<i>N/I</i>	<i>N/I</i>	
<i>N/I</i>	<i>N/I</i>	
<i>N/I</i>	<i>N/I</i>	
<i>N/I</i>	<i>N/I</i>	

QUALITATIVE REQUIREMENTS

Proficiency Code Key		
	Scale Value	Definition: The individual
Task Performance Levels	1	Can do simple parts of the task. Needs to be told or shown how to do most of the task. (Extremely Limited)
	2	Can do most parts of the task. Needs only help on hardest parts. (Partially Proficient)
	3	Can do all parts of the task. Needs only a spot check of completed work. (Competent)
	4	Can do the complete task quickly and accurately. Can tell or show others how to do the task. (Highly Proficient)
Task Knowledge Levels	a	Can name parts, tools, and simple facts about the task. (Nomenclature)
	b	Can determine step-by-step procedures for doing the task. (Procedures)
	c	Can identify why and when the task must be done and why each step is needed. (Operating Principles)
	d	Can predict, isolate, and resolve problems about the task. (Advanced Theory)
Subject Knowledge Levels	A	Can identify basic facts and terms about the subject. (Facts)
	B	Can identify relationship of basic facts and state general principles about the subject. (Principles)
	C	Can analyze facts and principles and draw conclusions about the subject. (Analysis)
	D	Can evaluate conditions and make proper decisions about the subject. (Evaluation)
Explanations 1. A task knowledge level value may be used alone or with a task performance level value to define a level of knowledge for a specific task. (Example: b and 1b) 2. A subject knowledge level value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks. 3. “-“ This mark is used alone instead of a scale value to show that no proficiency training is provided in the course or CDC.		

1. Tasks, Knowledge, and Technical References	2. Core Tasks		3. Certification for OJT					4. Proficiency Codes Used To Indicate Required Training Level (refer to PC key)									
			A	B	C	D	E	A 3-Skill level		B 5-Skill Level				C 7-Skill level			D
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-lvl CRS	DL	5-lvl CDC	5-lvl OJT	QTP	DL	7-lvl OJT	QTP	DL	Advanced Tng CRS
1. Mission and Organization of the USAF Medical Service																	
1.1. Medical Service (HQ USAF/SG Ltr, Air Force Medical Service (AFMS) Strategic Plan, 26 Mar 07; AFPD 48-1, Aerospace Medicine Program, 23 Aug 11; HQ USAF/SG1, The AFMS Flight Path for the USAF Combat Wing Organization - Medical, 16 Aug 11)																	
1.1.1. Purpose and organization								A		B	-			-			-
1.1.2. Aerospace Medical Program								A		B	-			-			-
1.2. Bioenvironmental Engineering (BE) (AFMOA/SG3PB, Bioenvironmental Engineering Operational Execution Plan 2008; AFMSA/SG3PB, Bioenvironmental Engineering (BE) Capabilities Execution, 21 Jan 09; Concept Of Operations for UTCs)																	
1.2.1. Mission and organization of BE								A		B	-			-			-
1.2.2. Roles and interactions of BE with other agencies (state, local, federal and base)								A		B	-			-			-
1.2.3. BE UTCs								-		B	-			-			B
2. General Administration and Office Management																	
2.1. Equipment and Supply Management																	
2.1.1. Maintain BE equipment								-		-	-			-			-
2.1.1.1. Inventory equipment using Custodian Authorization/Custody Receipt Listings (CA/CRL)								-		-	-			-			-
2.1.1.2. Establish equipment maintenance program								-		-	-			-			-
2.1.1.3. Coordinate maintenance of equipment with appropriate agencies (PMEL, BMET, etc.)								-		-	-			-			-
2.1.1.4. Create/Implement equipment maintenance schedule								-		-	-			-			-
2.1.1.5. Develop equipment operational function testing checklists								-		-	-			-			-
2.1.1.6. Establish procedures for accountability of equipment								-		-	-			-			-
2.1.1.7. Evaluate serviceability of equipment, tools, parts, or supplies								-		-	-			-			-

1. Tasks, Knowledge, and Technical References	2. Core Tasks		3. Certification for OJT					4. Proficiency Codes Used To Indicate Required Training Level (refer to PC key)									
			A	B	C	D	E	A 3-Skill level		B 5-Skill Level				C 7-Skill level			D
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-1st CRS	DL	5-1st CDC	5-1st OJT	QTP	DL	7-1st OJT	QTP	DL	Advanced Tng CRS
2.1.1.8. Identify and report equipment problems								-		-	-			-			-
2.1.1.9. Initiate requisition or turn-in of equipment or parts								-		-	-			-			-
2.1.1.10. Initiate letters of justification for equipment related matters								-		-	-			-			-
2.1.2. Maintain BE supplies								-		-	-			-			-
2.1.2.1. Maintain supply inventory								-		-	-			-			-
2.1.2.2. Coordinate supply related matters with appropriate agencies (Medical Logistics, Base Supply, HAZMART, etc)								-		-	-			-			-
2.1.2.3. Establish procedures for accountability of supplies								-		-	-			-			-
2.1.2.4. Evaluate serviceability of supplies								-		-	-			-			-
2.1.2.5. Initiate requisition or turn-in of supplies								-		-	-			-			-
2.2. Resource Management <i>(The Planning, Programming, Budgeting and Execution (PPBE) System & The Air Force Corporate Structure (AFCS) Primer, 2003; AFI 41-120, Medical Resource Operations, 18 Oct 01; AFI 65-601V1, Budget Guidance and Procedures, 16 Aug 2012; Local Cost Center Management Guide, if available)</i>																	
2.2.1. Planning, Programming, Budgeting and Execution System																	
2.2.1.1. Planning, Programming, Budgeting and Execution								-		-	-			-			-
2.2.1.2. Draft budget requirements								-		-	-			-			-
2.2.1.3. Develop Fin Plans								-		-	-			-			-
2.2.1.4. Budget execution								-		-	-			-			-
2.2.2. Contracting																	
2.2.2.1. USAF contracting process								-		-	-			-			-
2.2.2.2. Write a statement of work (SOW)								-		-	-			-			-
2.2.3 Manpower Resources																	
2.2.3.1. BE manning								-		-	-			-			-
2.2.3.2. Develop and evaluate work schedules								-		-	-			-			-
2.3. Program Management <i>(AFI 90-201, The Air Force Inspection System, 2 Aug 13; AFI 25-201, Support Agreements Procedures, 18 Oct 13)</i>																	
2.3.1. Internal and external								-		A	-			-			-

1. Tasks, Knowledge, and Technical References	2. Core Tasks		3. Certification for OJT					4. Proficiency Codes Used To Indicate Required Training Level (refer to PC key)									
			A	B	C	D	E	A 3-Skill level		B 5-Skill Level				C 7-Skill level			D
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-1st CRS	DL	5-1st CDC	5-1st OJT	QTP	DL	7-1st OJT	QTP	DL	Advanced Tng CRS
inspections / assessments (ESOH CAMP, HSI, RI, OSHA, EPA, NRC, self-inspections, etc.)																	
2.3.2. BE requirements of support agreements								-		A	-			-			-
2.3.3. Construction plan review								-		B	-			-			-
2.3.4. Review local work order requests	5							-		a	2b	Y		-			-
3. Fundamental Skills																	
3.1. Communication																	
3.1.1. Fundamentals of written correspondence								-		A	-			-			-
3.1.2. Fundamentals of public speaking								-		A	-			-			-
3.1.3. Fundamentals of risk communication								A		-	-			-			-
3.1.4. Prepare and conduct oral and written communication								-		-	-			-			-
3.1.5. Brief CBRN (and physical) hazards / risks to personnel (shop personnel, commanders, incident commander, etc)		W						-		b	-			-			3c
3.1.6. Prepare health risk assessment reports		W						-		a	-			-			-
3.1.7. Develop training and lesson plans, programs, procedures, or training aids								-		-	-			-			-
3.1.8. Use field communication systems		W						-		a	-			-			-
3.2. Basic Mathematics																	
3.2.1. Solve calculations using basic arithmetic functions (add, subtract, multiply, and divide whole numbers, fractions, and decimals)	5	W						2b		-	-			-			-
3.2.2. Perform conversion of units using dimensional analysis (formula manipulation), metric conversions	5	W						2b		-	3c	Y		-			-
3.2.3. Solve calculations using exponential powers								2b		-	-			-			-

1. Tasks, Knowledge, and Technical References	2. Core Tasks		3. Certification for OJT					4. Proficiency Codes Used To Indicate Required Training Level (refer to PC key)									
			A	B	C	D	E	A 3-Skill level		B 5-Skill Level				C 7-Skill level			D
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-1st CRS	DL	5-1st CDC	5-1st OJT	QTP	DL	7-1st OJT	QTP	DL	Advanced Tng CRS
3.2.4. Solve calculations using scientific notation								2b		-	-			-			-
3.2.5. Calculate areas and volumes								2b		-	-			-			-
3.2.6. Use basic statistics	5							1a		-	2b	Y		-			3c
3.3. Chemistry (Basic Chemistry, 7th Ed.)																	
3.3.1. Composition of matter								A		B	-			-			-
3.3.2. Physical characteristics of solids, liquids, and gases								A		B	-			-			-
3.3.3. Periodic Table of the Elements								A		B	-			-			-
3.3.4. Compounds								A		B	-			-			-
3.3.5. Acids and bases								A		B	-			-			-
3.3.6. Calculate gas laws								1a		B	-			-			-
3.4. Anatomy and Physiology (Anatomy and Physiology, 7th Ed.)																	
3.4.1. Basic structure and functions of the cell								A		B	-			-			-
3.4.2. Basic structure and functions of tissues								A		B	-			-			-
3.4.3. Basic structure and functions of organ systems								A		B	-			-			-
3.5. Toxicology (Toxicology: The Basic Science of Poisons, 7th Ed.; The Dose Makes the Poison)																	
3.5.1. Dose response relationships								B		B	-			-			-
3.5.2. Basic toxicological terms								A		A	-			-			-
3.5.3. Biological response factors and variables								A		B	-			-			-
3.5.4. Biological effects of toxic substances								A		B	-			-			-
3.5.5. Exposure routes								A		B	-			-			-
3.5.6. Classification of toxic materials								A		B	-			-			-
3.5.7. Physiological effects								A		B	-			-			-
3.5.8. Physical forms of toxic agents								A		B	-			-			-
3.5.9. Chemical forms of toxic agents								A		B	-			-			-
3.6. Ecology and Environmental Toxicology (Environmental Science: The Way the World Works, 7th Ed.; Toxic Substances in the Environment; Toxic Air Pollution Handbook; Chemical Fate and Transport in the Environment, 2nd Ed.)																	
3.6.1. Biosphere								A		B	-			-			-

1. Tasks, Knowledge, and Technical References	2. Core Tasks		3. Certification for OJT					4. Proficiency Codes Used To Indicate Required Training Level (refer to PC key)									
			A	B	C	D	E	A 3-Skill level		B 5-Skill Level			C 7-Skill level			D	
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-1st CRS	DL	5-1st CDC	5-1st OJT	QTP	DL	7-1st OJT	QTP	DL	Advanced Tng CRS
3.6.2. Ecological life forms								A		B	-			-			-
3.6.3. Toxic substances in the environment								A		B	-			-			-
3.6.4. Effects of pollution on humans								A		B	-			-			-
4. Occupational and Environmental Health (OEH) Program																	
4.1. OEH Program Overview (AFI 48-145, Occupational and Environmental Health Program, 22 Jul 14; AFMAN 48-146, Occupational and Environmental Health Program Management, 9 Oct 12; Occupational and Environmental Health Exposure Controls, 1 Oct 08; Fundamentals of Industrial Hygiene, 6th Ed.; AIHA, The Occupational Environment: Its Evaluation, Control and Management, 3 Ed.; Bioenvironmental Engineering Field Manual, 2008; AFIOH Environmental Health Site Assessment Guide (IERA-RS-BR-TR-2003-002); AFIOH Assessment Methodology for Toxic Industrial Chemicals/Toxic Industrial Materials (TICs/TIMs), 2006; ACGIH TLVs and BEIs; NIOSH Pocket Guide; AFI 91-203, Air Force Consolidated Occupational Safety Instruction, 15 Jun 12; DOEHRs Student Guide/User Manual)																	
4.1.1. OEH Program								A		B	-			-			-
4.1.2. Occupational and Environmental Health Site Assessment								A		B	-			-			B
4.1.2.1. Site selection		W						A		B	-			-			B
4.1.2.2. Conceptual Site Model	5,7	W						A		B	2b	Y		3c	Y		-
4.1.2.3. Exposure Assessment Strategies	5,7	W						A		B	2b	Y		3c	Y		C
4.1.2.4. Exposure Pathway Evaluation	5,7	W						-		b	2b	Y		3c	Y		b
4.1.2.5. Total exposure health risk (additive, synergistic, multiple routes, etc.)								A		B	-			-			C
4.1.2.6. OEH exposure controls								A		B	-			-			C
4.1.2.7. Conduct predictive exposure assessments using data and intel	5							a		b	2b	Y		-			2b
4.1.2.8. Perform exposure modeling calculations	7							-		-	-			2b			3c
4.1.2.9. Associate exposure with affected personnel using spatial and temporal reference marks	7							-		b	-			2b			3c
4.1.2.10. Use GPS (coordinates)	5							-		-	2b			-			3c
4.1.3. Toxic industrial chemical/toxic industrial material (TIC/TIM) vulnerability assessments								A		B	-			-			B
4.1.4. Perform TIC/TIM	7							-		-	-			3c	Y		-

1. Tasks, Knowledge, and Technical References	2. Core Tasks		3. Certification for OJT					4. Proficiency Codes Used To Indicate Required Training Level (refer to PC key)									
			A	B	C	D	E	A 3-Skill level		B 5-Skill Level			C 7-Skill level			D	
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-1st CRS	DL	5-1st CDC	5-1st OJT	QTP	DL	7-1st OJT	QTP	DL	Advanced Tng CRS
vulnerability assessment																	
4.1.4.1. Collect data required in TIC/TIM vulnerability assessment	5							-		a	2b	Y		-			-
4.1.5. Emergency Planning and Community Right-to-Know Act (EPCRA)								A		B	-			-			-
4.1.6. Federal, DOD, AF directives and technical orders								A		B	-			-			-
4.1.7. Defense Occupational and Environmental Health Readiness System (DOEHRs)								A		B	-			-			B
4.1.8. Utilize the DOEHRs	5							2b		-	3c	Y		-			3c
4.1.9. Review DOEHRs input	7							-		-	-			3c	Y		3c
4.1.10. Health risk assessment								A		B	-			-			C
4.1.11. Roles and interaction in personal protective equipment (PPE) guidance								A		B	-			-			-
4.1.12. Use, selection and limitations of PPE	5	W						B		C				-			C
4.1.13. Sample result interpretation								A		B	-			-			C
4.2. OEH Process Assessment (AFI 48-145, Occupational and Environmental Health Program, 22 Jul 14; AFMOA Ltr, Interim Guidance - Bioenvironmental Industrial (BE) Occupational Health Program, 9 Apr 03; AFMAN 48-146, Occupational and Environmental Health Program Management, 9 Oct 12)																	
4.2.1. Workplace categorization								A		B	-			-			-
4.2.2. Perform routine assessments	5	W						b		a	2b	Y		-			-
4.2.2.1. Review routine assessments	7							-		-	-			3c	Y		-
4.2.3. Prioritize special assessments	7	W						a		a	-			3c	Y		-
4.2.4. Investigate occupational illness/injury	5	W						-		a	2b	Y		-			-
4.2.5. Conduct pregnancy profile evaluations	5							-		a	2b	Y		-			-
4.3. Hazard Abatement Program (AFI 91-202, The USAF Mishap Prevention Program, Atch 7, 5 Aug 11)																	
4.3.1. Risk assessment								-		B	-			-			-

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			A	B	C	D	E	A 3-Skill level		B 5-Skill Level			C 7-Skill level			D	
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-1st CRS	DL	5-1st CDC	5-1st OJT	QTP	DL	7-1st OJT	QTP	DL	Advanced Tng CRS
codes (RACs)																	
4.3.2. Assign occupational health risk assessment codes (RACs)	7							-		b	-			3c	Y		-
4.4. Hazard Communication <i>(AFI 90-821, Hazard Communication, 27 Jan 14; AFI 48-158, Occupational Exposure to Hazardous Chemicals in Laboratories, 27 Mar 14)</i>																	
4.4.1. Program overview								A		B	-			-			-
4.4.2. Key player(s) responsibilities								A		B	-			-			-
4.4.3. Evaluate shop hazard communication (HAZCOM) programs	5							a		b	3c	Y		-			-
4.4.4. Laboratory chemical hygiene programs								-		A	-			-			-
4.5. Sampling <i>(Standard Methods for the Examination of Water and Wastewater; AFMAN 48-155, Occupational and Environmental Health Exposure Controls, 1 Oct 08; Industrial Ventilation A Manual of Recommended Practice, 26th Ed.; ACGIH TLVs and BEIs; 29 CFR 1910, Occupational Safety and Health Standards; Emergency Response Planning Guidelines (ERPG) & Workplace Environmental Exposure Levels (WEEL) Handbook; 40 CFR 141, National Primary Drinking Water Regulations; Technical Guide 230, Chemical Exposure Guidelines for Deployed Military Personnel, published by USAPHC)</i>																	
4.5.1. Sampling Overview																	
4.5.1.1. Sampling methodology (solid, liquid, gas)								A		B	-			-			-
4.5.1.2. OEH sample guide (include USAPHC guide)		W						A		B	-			-			-
4.5.1.3. Prepare and/or preserve samples for shipment	5	W						a		a	2b	Y		-			-
4.5.1.4. Decontaminate equipment								1a		b	-			-			2b
4.5.1.5. Occupational and Environmental Exposure Limits	5,7	W						A		B	-			C			-
4.5.1.5.1. Select appropriate occupational and environmental exposure limit (OEEL) (TLV, MCL, SPEGL, MEG, STEL, CEILING, PEL, Excursion Limits, etc)	5,7	W						1a		a	2b	Y		3c	Y		3c
4.5.1.6. Sample collection quality assurance/quality control program								A		B	-			-			-
4.5.2. Occupational and Environmental Air / Gas Sampling <i>(Fundamentals of Industrial Hygiene, 6th Ed.; AIHA, The Occupational Environment: Its Evaluation, Control and</i>																	

1. Tasks, Knowledge, and Technical References	2. Core Tasks		3. Certification for OJT					4. Proficiency Codes Used To Indicate Required Training Level (refer to PC key)									
			A	B	C	D	E	A 3-Skill level		B 5-Skill Level			C 7-Skill level			D	
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-yr CRS	DL	5-yr CDC	5-yr OJT	QTP	DL	7-yr OJT	QTP	DL	Advanced Tng CRS
Management, 3 Ed.; NIOSH Publication 77-173, Occupational Exposure Sampling Strategy Manual; NIOSH Manual of Analytical Methods, Chp D; Equipment User's Manuals)																	
4.5.2.1. Types of air samples (integrated and grab)								B		B	-			-			-
4.5.2.2. Air sampling devices (direct reading instruments, pumps, passive dosimeters, etc.)		W						B		B	-			-			-
4.5.2.3. Air sample collection (media and samplers--i.e. Cyclone, IOM)								B		B	-			-			-
4.5.2.4. Establish air sampling strategies	5	W						b		b	3c	Y		-			3c
4.5.2.5. Calculate sampling rates and volumes	5	W						2b		b	3c	Y		-			3c
4.5.2.6. Calibrate and Operate Direct reading instruments (DRIs, e.g. Hapsite, TVA-1000, Multi-Gas Meters, detector tubes, etc)								-		-	-		Y	-		Y	-
4.5.2.6.1. Detector Tubes or Chips (e.g. Drager CDS Kit)	5,7	W						2b		b	2b	Y	Y	3c	Y	Y	
4.5.2.6.2. PID/FID	5,7	W						2b		b	2b	Y		3c	Y		
4.5.2.6.3. Portable GC-MS (e.g. Hapsite)	5,7	W						1a		b	2b	Y		3c	Y		
4.5.2.6.4. Combustible Gas Meters	5,7	W						2b		b	2b	Y		3c	Y		
4.5.2.7. Calibrate air sampling pumps	5	W						2b		c	3c	Y		-			-
4.5.2.8. Collect area air samples	5	W						-		c	3c	Y		-			2c
4.5.2.9. Collect breathing zone air samples	5	W						2b		c	3c	Y		-			-
4.5.2.10. Calculate equivalent OEELs	5,7	W						1b		c	3c	Y		3c	Y		3c
4.5.2.11. Convert raw concentrations (i.e. grams to mg/m3)	5,7	W						1c		c	2c	Y		3c	Y		3c
4.5.2.12. Calculate time weighted averages (TWA)	5	W						2c		c	3c	Y		-			-
4.5.2.13. Calculate upper and lower confidence limits	5,7	W						1b		c	2b	Y		3c	Y		3c
4.5.2.14. Calculate	5	W						2c		c	3c	Y		-			3c

1. Tasks, Knowledge, and Technical References	2. Core Tasks		3. Certification for OJT					4. Proficiency Codes Used To Indicate Required Training Level (refer to PC key)									
			A	B	C	D	E	A 3-Skill level		B 5-Skill Level			C 7-Skill level			D	
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-1st CRS	DL	5-1st CDC	5-1st OJT	QTP	DL	7-1st OJT	QTP	DL	Advanced Tng CRS
compliance factors (unity)																	
4.5.2.15. Correct results for atmospheric conditions								-		-	-			-			-
4.5.2.16. Interpret air sample results	5,7	W						-		a	2b	Y		3c	Y		3c
4.5.2.17. DOEHRS data entry	5	W						2b		-	3c	Y		-			-
4.5.3. Soil / Solid Sampling (EPA Manual SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods; ASTM D 1452, Standard Practice for Soil Investigation and Sampling by Auger Borings; ASTM D 4700, Standard Guide for Soil Sampling from the Vadose Zone; ASTM D 5633, Standard Practice for Sampling with a Scoop; ASTM D 5743, EPA SOP 2009, Drum Sampling; EPA SOP 2012, Soil Sampling; Equipment User's Manuals)																	
4.5.3.1. Sampling methods for soil and solids								A		B	-			-			C
4.5.3.2. Determine or establish soil/solid sampling strategies	5	W						a		a	2b	Y		-			2c
4.5.3.3. Collect soil/solid samples	5,7	W						1a		a	2b	Y		3c	Y		3c
4.5.3.4. Soil/Solid sampling devices (DRI, XRF, etc.)								B		B	-			-			B
4.5.3.4.1. Portable laboratory analysis kit (HACH or equivalent)								-		-	-			-			-
4.5.3.4.2. FT-IR (e.g. HAZMAT ID)	5,7	W						1a		a	2b	Y	Y	3c	Y	Y	3c
4.5.3.5. Field analyze soil/solid samples	5,7	W						1a		a	2b	Y		3c	Y		3c
4.5.3.6. Interpret soil sample results	5,7	W						-		a	2b	Y		3c	Y		3c
4.5.3.7. DOEHRS data entry	5	W						2b		-	3c	Y		-			-
4.6. Chemical Health Hazards (Fundamentals of Industrial Hygiene, 6th Ed.; AIHA, The Occupational Environment: Its Evaluation, Control and Management, 3 Ed.; AFI 91-203, Air Force Consolidated Occupational Safety Instruction, 15 Jun 12; Quick Selection Guide to Chemical Protective Clothing; NIOSH Recommendations for Chemical Protective Clothing; AFI 32-7086, Hazardous Materials Management, 1 Nov 04)																	
4.6.1. Chemical hazards (industrial, etc.)								A		B	-			-			C
4.6.2. Substance specific standards								A		B	-			-			C
4.6.3. Identify substance specific standard compliance requirements	5							-		a	2b	Y		-			-
4.6.3.1. Determine substance specific standard compliance	7							-		-	-			3c	Y		3c

1. Tasks, Knowledge, and Technical References	2. Core Tasks		3. Certification for OJT					4. Proficiency Codes Used To Indicate Required Training Level (refer to PC key)									
			A	B	C	D	E	A 3-Skill level		B 5-Skill Level				C 7-Skill level			D
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-1st CRS	DL	5-1st CDC	5-1st OJT	QTP	DL	7-1st OJT	QTP	DL	Advanced Tng CRS
4.6.4. Identify/Analyze chemical hazards based on routes of entry (inhalation, injection, ingestion, absorption, contact, ototoxins)	5	W						-		c	3c	Y		-			3c
4.6.5. Determine regulated areas for chemical hazards	5,7							A		B				C			C
4.6.6. Chemical hazard controls								A		B	-			-			C
4.6.7. Protective clothing concepts (permeation, breakthrough, etc.)								A		B	-			-			-
4.6.8. HAZMAT request (AF Form 3952 or equivalent)								-		a	-			-			-
4.6.9. Safety Data Sheet (SDS)								A		A	-			-			-
4.6.10. HAZMAT reports and inventories								A		B	-			-			-
4.6.11. DOEHRS data entry	5	W						2b		-	3c	Y		-			-
4.7. Biological Health Hazards <i>(Fundamentals of Industrial Hygiene, 5th Ed.; AIHA, The Occupational Environment: Its Evaluation, Control and Management, 3 Ed.)</i>																	
4.7.1. Biological hazards (viruses, bacteria, fungi, protozoa; industrial, WMD, etc.)								A		B	-			-			C
4.7.2. Identify/Evaluate biological health hazards	5	W						b		b	2b	Y		-			3c
4.7.2.1. Hand-Held Assays (e.g. HHA Kits)	5	W						b		a	2b	Y		-			3c
4.7.2.2. High Volume Biological Air Samplers (e.g. XMX)	5	W						b		a	2b	Y		-			3c
4.7.3. Biological hazard controls (pre/post)								A		B	-			-			C
4.7.4. Indoor air quality								A		B	-			-			C
4.7.5. Determine or establish biological sampling strategies	5	W						-		a	2b	Y		-			3c
4.7.6. Lab Coordination								-		B	-			-			-
4.8. Confined Spaces <i>(AFI 91-203, Air Force Consolidated Occupational Safety Instruction, 15 Jun 12; Lewis Publishers, Complete Confined Spaces Handbook; Equipment User Manuals)</i>																	
4.8.1. Roles and interactions in Confined								A		B	-			-			-

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			A	B	C	D	E	A 3-Skill level		B 5-Skill Level				C 7-Skill level			D
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-1st CRS	DL	5-1st CDC	5-1st OJT	QTP	DL	7-1st OJT	QTP	DL	Advanced Tng CRS
Space Program																	
4.8.2. Classify confined spaces (permit/non-permit)	5,7							1a		c	2b	Y		3c	Y		-
4.8.3. Test confined space atmospheric conditions and interpret results	5							2b		a	2b	Y		-			-
4.8.4. Confined space hazard controls	7							A		B	-			C			-
4.8.5. Operate atmosphere monitoring equipment (combustible gas meter, PID)	5,7							2b		a	2b	Y		3c	Y		3c
4.8.6. Provide atmosphere monitoring equipment training (combustible gas meter, PID)	5							-		a	2b	Y		-			-
4.8.7. Certify organizational personnel to test confined spaces	7							-		b	-			3c	Y		C
4.8.8. Review confined space master entry plans and non-routine entry permits	5							-		a	2b	Y		-			3c
4.8.9. Approve confined space master entry plans and non-routine entry permits	7							-		-	-			3c	Y		3c
4.8.10. Confined Space master entry permits								A		B	-			-			-
4.9. Radiation																	
4.9.1. Radiation Overview																	
<i>(Basic Radiation Protection Technology, 5th Ed.; Fundamentals of Industrial Hygiene, 5th Ed.; AIHA, The Occupational Environment: Its Evaluation, Control and Management, 3 Ed.)</i>																	
4.9.1.1. Roles and interactions in Radiation Safety Program Management								A		B	-			-			-
4.9.1.2. Fundamental concepts of energy and mass								A		B	-			-			B
4.9.1.3. Electromagnetic spectrum								A		B	-			-			B
4.9.1.4. Types of radiation								A		B	-			-			C
4.9.1.5. RSO Course or equivalent								-		-	-			-			-
4.9.2. Ionizing Radiation																	
<i>(Basic Radiation Protection Technology, 5th Ed.; Fundamentals of Industrial Hygiene, 5th Ed.; AIHA, The Occupational Environment: Its Evaluation, Control and Management, 3 Ed.; AFIOH Report IOH-SD-BR-SR-2005-0004,</i>																	

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			A	B	C	D	E	A 3-Skill level		B 5-Skill Level			C 7-Skill level			D	
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-1st CRS	DL	5-1st CDC	5-1st OJT	QTP	DL	7-1st OJT	QTP	DL	Advanced Tng CRS
Bioenvironmental Engineer's Guide to Ionizing Radiation; AFI 48-148, Ionizing Radiation Protection, 21 Sep 11; Radioanalytical Sampling Guide; T.O. 33B-1-1, Nondestructive Inspection Methods; Equipment User's Manual)																	
4.9.2.1. Radioactive decay								A		B	-			-			B
4.9.2.2. Radiation and radioisotopes (quantities and units)								A		B	-			-			B
4.9.2.3. Interactions with matter								A		B	-			-			B
4.9.2.4. Biological effects of ionizing radiation								A		B	-			-			B
4.9.2.5. Sources, use and production of X-rays								A		B	-			-			B
4.9.2.6. Identify radiological/nuclear hazards	5,7	W						a		a	2b	Y		3c	Y		3c
4.9.2.6.1. Uses and hazards of depleted uranium								A		B	-			-			-
4.9.2.6.2. Decay and monitoring of radon gas								A		B	-			-			-
4.9.2.7. Radioisotope permit programs								-		B	-			-			-
4.9.2.8. Perform RAM storage and use surveys	5	W						1a		a	2b	Y		-			2c
4.9.2.9. Perform medical and industrial diagnostic X-ray scatter surveys	5,7	W						1a		a	2b	Y		3c	Y		3c
4.9.2.10. Perform swipe tests of radiological sources	5	W						1a		c	3c	Y		-			2c
4.9.2.10.1. Perform field analysis of samples (utilizing probe efficiency)	5	W						1a		a	2b	Y		-			2c
4.9.2.10.2. Identify common isotopes and determine types of decay	5	W						1a		a	2b	Y		-			2c
4.9.2.11. Calibrate / Operate Radiation Detection Equipment (i.e. 886H)																	
4.9.2.11.1. Ion Chamber (i.e. Victoreen 451P)	5,7	W						1a		a	2b	Y		3c	Y		3c
4.9.2.11.2. Gamma Spec (i.e. SAM-940)	5,7	W						1a		a	2b	Y	Y	3c	Y	Y	3c
4.9.2.11.3. Geiger-Mueller (i.e. ADM-300)	5,7	W						1a		a	2b	Y		3c	Y		3c
4.9.2.11.4. EPD (i.e. MK-2 & N-2)	5,7	W						1a		a	2b	Y	Y	3c	Y	Y	3c
4.9.2.11.5. High Volume Air Sampler (i.e. RaDeco)	5,7	W						1a		a	2b	Y	Y	3c	Y	Y	3c
4.9.2.12. Investigate suspected ionizing radiation overexposures/abnormal	7	W						a		b	-			2b	Y		3c

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			A	B	C	D	E	A 3-Skill level		B 5-Skill Level			C 7-Skill level			D	
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-1st CRS	DL	5-1st CDC	5-1st OJT	QTP	DL	7-1st OJT	QTP	DL	Advanced Tng CRS
exposures																	
4.9.2.13. Perform ionizing radiation calculations (dose, dose rate, stay time, protection factors, decay, etc.)	5,7	W						1a		a	2b	Y		3c	Y		3c
4.9.2.14. Ionizing radiation hazard controls								A		B	-			-			C
4.9.2.15. As-low-as-reasonably achievable (ALARA) training								A		A	-			-			-
4.9.2.16. Survey radioactive materials for shipment or transport	5	W						a		a	2b	Y		-			3c
4.9.2.17. Disposal methods for radioactive material with Air Force Radiation and Radioactive Recycling and Disposal (AFRRAD) office		W						A		B	-			-			B
4.9.2.18. Heritage (museum & static displays-reference later)								-		-	-			-			-
4.9.3. USAF Personnel Dosimetry Program (AFMAN 48-125, Personnel Ionizing Radiation Dosimetry, 4 Oct 11)																	
4.9.3.1. Roles and interaction in the USAF Personnel Dosimetry Program (reporting)								A		B	-			-			-
4.9.3.2. Types of personal dosimeters								A		B	-			-			-
4.9.3.3. Enroll/Disenroll personnel	5	W						2b		b	3c	Y		-			-
4.9.3.4. Exchange/ship dosimeters	5	W						2b		b	3c	Y		-			-
4.9.3.5. TLD results and histories of occupational exposure to ionizing radiation								A		B	-			-			-
4.9.4. EMF (Fundamentals of Industrial Hygiene, 5th Ed.; AIHA, The Occupational Environment: Its Evaluation, Control and Management, 3 Ed.; AFI 48-109, Electromagnetic Frequency Radiation (EMFR) Occupational and Environmental Health Program, 1 Aug 14; AFOEHL Rpt 89-023RC011DRA, Base Level Management of Radio Frequency Radiation Protection Program; Equipment User Manuals)																	
4.9.4.1. Principles of EMF								A		B	-			-			B
4.9.4.2. Health risks of EMF exposure								A		B	-			-			B
4.9.4.3. Types of EMF								A		A	-			-			B

1. Tasks, Knowledge, and Technical References	2. Core Tasks		3. Certification for OJT					4. Proficiency Codes Used To Indicate Required Training Level (refer to PC key)									
			A	B	C	D	E	A 3-Skill level		B 5-Skill Level			C 7-Skill level			D	
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-yr CRS	DL	5-yr CDC	5-yr OJT	QTP	DL	7-yr OJT	QTP	DL	Advanced Tng CRS
emitters																	
4.9.4.4. Perform EMF risk assessment	7	W						a		b	-			3c	Y		3c
4.9.4.5. Determine electromagnetic frequency (EMF) radiation maximum permissible exposure (MPE)	5,7	W						1a		b	2b	Y		3c	Y		3c
4.9.4.6. Calculate EMF hazard distances	5,7	W						1a		b	2b	Y		3c	Y		3c
4.9.4.7. Perform EMF measurement surveys	5,7	W						1a		a	2b	Y		3c	Y		3c
4.9.4.8. EMF controls								A		B	-			-			C
4.9.4.9. Investigate potential EMF overexposures or accidents	7							-		b	-			3c	Y		3c
4.9.4.10. Use EMF instrumentation	5,7	W						1a		a	2b	Y		3c	Y		3c
4.9.4.11. Calculate probe burnout	5,7	W						1a		a	2b	Y		3c	Y		3c
4.9.5. Lasers (Directed Energy) (Fundamentals of Industrial Hygiene, 5th Ed.; AIHA, The Occupational Environment: Its Evaluation, Control and Management, 3 Ed.; AFI 48-139, Laser and Optical Radiation Protection Program,25 Jul 12; AL-TR-1991-0112, Base Level Management of Laser Radiation Protection Program)																	
4.9.5.1. Laser fundamentals								A		A	-			-			B
4.9.5.2. Biological effects of lasers								A		B	-			-			B
4.9.5.3. Identify and analyze laser sources/ hazards								a		b	-			-			c
4.9.5.4. Maximum permissible exposures								A		A	-			-			B
4.9.5.5. Nominal hazard zone								A		A	-			-			B
4.9.5.6. Nominal ocular hazard distance								A		A	-			-			B
4.9.5.7. Perform theoretical laser hazard (LHAZ) evaluations								-		-	-			-			2b
4.9.5.8. Laser controls								A		B	-			-			C
4.9.5.9. LSO Course								-		-	-			-			-
4.9.5.10. Investigate potential Laser overexposures or accidents	7							-		b	-			3c	Y		3c
4.9.6. Other Nonionizing Radiation Hazards and Controls: UV and IR (Fundamentals of Industrial Hygiene, 5h Ed.; AIHA, The Occupational Environment: Its Evaluation, Control and Management, 3 Ed.)																	

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			A	B	C	D	E	A 3-Skill level		B 5-Skill Level				C 7-Skill level			D
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-1st CRS	DL	5-1st CDC	5-1st OJT	QTP	DL	7-1st OJT	QTP	DL	Advanced Tng CRS
4.9.6.1. UV/IR sources, hazards and controls (water treatment, medical use, welding, etc.)								A		B	-			-			C
4.10. Noise <i>(Fundamentals of Industrial Hygiene, 5th Ed.; AIHA, The Occupational Environment: Its Evaluation, Control and Management, 3 Ed.; The Noise Manual, AFOSH Std 48-20, Occupational Noise and Hearing Conservation Program, 10 May 13; DoDI 6055.12, Hearing Conservation Program, 3 Dec 10; ANSI S3.1-1999 (R2003), Maximum Permissible Ambient Noise Levels for Audiometric Test Rooms; AFRL Attenuation Performance of Auditory Protection Devices, Helmets, and Communication Equipment; Equipment User Manuals)</i>																	
4.10.1. Roles and interactions in the Occupational Noise and Hearing Conservation Program								A		B	-			-			-
4.10.2. Physical properties of sound								A		B	-			-			-
4.10.3. Quantities and units of sound								A		B	-			-			-
4.10.4. Effects of noise exposure								A		B	-			-			-
4.10.5. Perform noise calculations	5	W						1a		b	2b	Y		-			-
4.10.6. Hazardous noise sources and areas								A		B	-			-			C
4.10.7. Perform noise source surveys (dBA, impact, impulse, speech interference)	5							2b		b	3c	Y		-			-
4.10.8. Perform worker exposure surveys (dosimetry)	5							1b		b	3c	Y		-			-
4.10.9. Perform octave band noise surveys	5							2b		b	3c	Y		-			c
4.10.10. Perform audiometric booth surveys	5							2b		b	3c	Y		-			-
4.10.11. Recommend noise controls at source, path, and receiver								-		c	-			-			3c
4.10.12. Verify adequacy of hearing protection devices (calculate attenuation factor)	5							1b		c	3c	Y		-			-
4.11. Ergonomics <i>(AIHA, The Occupational Environment: Its Evaluation, Control and Management, 3 Ed.; Fundamentals of Industrial Hygiene, 5th Ed.)</i>																	
4.11.1. Ergonomic Hazards								-		B	-			-			C
4.11.2. Identify and analyze								-		b	-			-			c

1. Tasks, Knowledge, and Technical References	2. Core Tasks		3. Certification for OJT					4. Proficiency Codes Used To Indicate Required Training Level (refer to PC key)									
			A	B	C	D	E	A 3-Skill level		B 5-Skill Level				C 7-Skill level			D
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-1st CRS	DL	5-1st CDC	5-1st OJT	QTP	DL	7-1st OJT	QTP	DL	Advanced Tng CRS
ergonomic hazards (screening or calculation)																	
4.11.3. Ergonomic controls								-		B	-			-			C
4.11.4. Recommend controls	7							-		-	-			3c	Y		3c
4.12. Thermal Stress <i>(AFPAM 48-151, Thermal Injury, 18 Nov 02; ACGIH TLVs and BEIs; AIHA, The Occupational Environment: Its Evaluation, Control and Management, 3 Ed.; Fundamentals of Industrial Hygiene, 5th Ed.; TB MED 507, Heat Stress Control and Heat Casualty Management, 7 Mar 03; TB MED 508, Prevention and Management of Cold-Weather Injuries, 1 Apr 05)</i>																	
4.12.1. Roles and interactions in the Thermal Stress Program								A		B	-			-			-
4.12.2. Thermal stress hazards								A		B	-			-			-
4.12.3. Analyze thermal stress hazards (i.e. WBGT)	5	W						2b		b	3c	Y		-			-
4.12.4. Recommend thermal stress controls	5							a		b	2b	Y		-			-
4.12.5. Health/medical effects of extended IPE/GCE wear								A		B	-			-			-
4.13. Mechanical Ventilation Systems <i>(AIHA, The Occupational Environment: Its Evaluation, Control and Management, 3 Ed.; Fundamentals of Industrial Hygiene, 5th Ed.; ACGIH Industrial Ventilation A Manual of Recommended Practice, 26th Ed.; Equipment User Manuals)</i>																	
4.13.1. Types of pressure								A		B	-			-			-
4.13.2. Pressure losses								A		B	-			-			-
4.13.3. Velocity								A		B	-			-			-
4.13.4. Mass flow								A		B	-			-			-
4.13.5. Ventilation system design reviews								-		B	-			-			-
4.13.6. Principles of dilution ventilation								A		B	-			-			B
4.13.7. Principles of local exhaust ventilation								A		B	-			-			B
4.13.8. Types of hoods								A		B	-			-			B
4.13.9. System advantages and disadvantages								A		B	-			-			B
4.13.10. Ventilation survey requirements (initial, baseline, routine)								A		B	-			-			C
4.13.11. Perform ventilation calculations	5							2b		b	3c	Y		-			-
4.13.12. Perform face velocity ventilation survey	5							2b		b	3c	Y		-			-
4.13.13. Perform capture	5							2b		b	3c	Y		-			-

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			A	B	C	D	E	A 3-Skill level		B 5-Skill Level			C 7-Skill level			D	
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-1st CRS	DL	5-1st CDC	5-1st OJT	QTP	DL	7-1st OJT	QTP	DL	Advanced Tng CRS
velocity survey																	
4.13.14. Perform pitot traverse ventilation survey	5							2b		b	3c	Y		-			-
4.13.15. Perform static pressure checks	5							2b		b	3c	Y		-			-
4.13.16. Follow up actions for deficient ventilation systems								A		B	-			-			C
4.14. Respiratory Protection (AIHA, <i>The Occupational Environment: Its Evaluation, Control and Management, 3 Ed.</i> ; <i>Fundamentals of Industrial Hygiene, 5th Ed.</i> ; NIOSH Pub No. 2005-100, NIOSH Respirator Selection Process 2004; AFI 48-137, <i>Respiratory Protection Program, 15 Jul 14</i> ; 29 CFR 1910.134, <i>Respiratory Protection; Equipment User's Manual</i>)																	
4.14.1. Roles and interactions in the Respiratory Protection (RP) Program								A		B	-			-			-
4.14.2. Types and classes of respirators								A		B	-			-			-
4.14.3. Operating principles of respirators								A		B	-			-			-
4.14.4. Work area RP program evaluation								A		B	-			-			-
4.14.5. Select RP equipment	5	W						1b		a	2b	Y		-			2c
4.14.6. Approve RP equipment	7	W						-		-	-			2b	Y		3c
4.14.7. Perform qualitative fit tests	5							2b		b	3c	Y		-			-
4.14.8. Perform quantitative fit tests	5	W						2b		b	3c	Y		-			-
4.14.9. Conduct RP training								-		b	-			-			-
4.14.10. Use, care and maintenance of respirators								A		B	-			-			-
4.15. Environmental Health Programs																	
4.15.1. Potable Water Program (Uniform Plumbing Code; TB MED 577, <i>Sanitary Control and Surveillance of Field Water Supplies, 1 May 10 published by the US Army</i> ; AFI 48-144, <i>Drinking Water Surveillance Program, 28 Sep 10</i> ; 40 CFR 141, <i>National Primary Drinking Water Regulations</i> ; AFMAN10-246, <i>Food and Water Protection Program, 27 May 14</i> ; AFI 32-1066, <i>Backflow Prevention Program, 20 Dec 10</i> ; ANSI/AWWA C651-05, <i>Disinfecting Water Mains, 1 Jun 05</i> ; USAFSAM IERA-RS-BR-TR-1999-005, <i>Guidance for Conducting Potable Water System Sanitary Surveys and Water Vulnerability Assessments</i> ; USAFSAM IOH-RS-BR-TR-2003-0001, <i>Water Vulnerability Assessment Guide</i>)																	
4.15.1.1. Regulatory requirements of the Safe Drinking Water Act (SDWA) and applicable Air Force Instructions (include annual PMR)								A		B	-			-			-

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			A	B	C	D	E	A 3-Skill level		B 5-Skill Level				C 7-Skill level			D
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-1st CRS	DL	5-1st CDC	5-1st OJT	QTP	DL	7-1st OJT	QTP	DL	Advanced Tng CRS
4.15.1.2. Sources and characteristics of potable water								A		B	-			-			-
4.15.1.3. Groundwater hydrology								A		B	-			-			-
4.15.1.4. Drinking water treatment								A		B	-			-			C
4.15.1.5. Drinking Water Systems								A		B	-			-			-
4.15.1.6. Field Drinking water		W						A		B	-			-			C
4.15.1.7. Disinfection of new water mains, water main breaks, or repairs								A		B	-			-			-
4.15.1.8. Compliance and noncompliance reporting requirements								A		B	-			-			-
4.15.1.9. Consumer confidence reports (CCRs)								A		B	-			-			-
4.15.1.10. Health risk ratings for backflow or cross connection areas								A		A	-			-			-
4.15.1.11. Assign Health Risk ratings								-		-	-			-			-
4.15.1.12. Base sanitary surveys								A		B	-			-			-
4.15.1.13. Perform base sanitary surveys	5,7	W						-		a	2b	Y		3c	Y		-
4.15.1.14. Water vulnerability assessment		W						A		B	-			-			B
4.15.1.15. Perform water vulnerability assessments	5,7	W						-		a	2b	Y		3c	Y		-
4.15.1.16. Perform aircraft watering point surveys	5,7	W						a		a	2b	Y		3c	Y		-
4.15.2. Nonpotable Water Program (AFI 48-114, <i>Swimming Pools, Spas And Hot Tubs, and Natural Bathing Areas</i> , 7 Mar 12)																	
4.15.2.1. Preseason or postseason inspections of swimming pools, hot tubs, or spas								A		B	-			-			-
4.15.2.2. Natural bathing area sanitary survey								A		B	-			-			-
4.15.3. Water/Liquid Sampling (AFI 48-144, <i>Drinking Water Surveillance Program</i> , 28 Sep 10; <i>Standard Methods for the Examination of Water and Wastewater</i> ; <i>Equipment User Manuals</i>)																	
4.15.3.1. Sampling Analysis and Monitoring								A		B	-			-			-

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			A	B	C	D	E	A 3-Skill level		B 5-Skill Level				C 7-Skill level			D
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-1st CRS	DL	5-1st CDC	5-1st OJT	QTP	DL	7-1st OJT	QTP	DL	Advanced Tng CRS
Plan																	
4.15.3.2. Develop a water/liquid sampling strategy	5	W						a		a	2b	Y		-			3c
4.15.3.3. Collect water samples from swimming pools, hot tubs, spas, natural bathing areas or other nonpotable sources	5	W						1a		b	3c	Y		-			-
4.15.3.4. Perform heterotrophic plate count								1a		c	-			-			-
4.15.3.5. Water/Liquid sampling devices equipment (i.e. DRI, HACH, DPD, etc.)								A		B	-			-			-
4.15.3.5.1. Portable GC/MS (e.g. HAPSITE)	5,7	W						1a		a	2b	Y		3c	Y		3c
4.15.3.5.2. Portable laboratory analysis kit (e.g. DREL)	5,7	W						1a		a	2b	Y		3c	Y		3c
4.15.3.5.3. FT-IR (e.g. HAZMAT ID)	5,7	W						1a		a	2b	Y		3c	Y		3c
4.15.3.6. Calibrate / operate water sampling equipment	5,7	W						1a		a	2b	Y		3c	Y		3c
4.15.3.7. Water sample collection equipment / containers								A		B	-			-			-
4.15.3.8. Perform chlorine analyses	5	W						2b		b	3c	Y		-			-
4.15.3.9. Perform pH analyses	5	W						2b		b	3c	Y		-			-
4.15.3.10. Perform fluoride analyses								1a		-	-			-			-
4.15.3.11. Collect potable water samples	5	W						2b		b	3c	Y		-			-
4.15.3.12. Perform presence-absence method (bacteriological / E.coli)	5	W						2b		b	3c	Y		-			-
4.16. Trend Analyses																	
4.16.1. Compile data for records, reports, logs, or trend analysis								1a		b	-			-			-
4.16.2. Develop trend analyses from results of Environmental Health Data	7	W						-		b	-			2b	Y		-
4.16.3. Develop trend analyses from Occupational	7	W						-		b	-			2b	Y		3c

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			A	B	C	D	E	A 3-Skill level		B 5-Skill Level				C 7-Skill level			D
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-1st CRS	DL	5-1st CDC	5-1st OJT	QTP	DL	7-1st OJT	QTP	DL	Advanced Tng CRS
Health Data																	
4.16.4. Basic Epidemiology								-		B	-			-			-
5. Response Operations <i>(AFI 10-2501, Air Force Emergency Management (EM) Program Planning and Operations, 24 Jan 07; AFMAN 10-2503, Operations in a Chemical, Biological, Radiological, Nuclear, and High-Yield Explosive (CBRNE) Environment, 7 Jul 11)</i>																	
5.1. Air Force Emergency Management Program		W						A		B	-			-			C
5.1.1. Complete DoD HazMat Awareness Course (CBT - Air University)	5	W						*		-	-			-			-
5.1.2. Complete DoD HazMat (NFPA) Operation Certification Course # 47202W	5	W						*		-	-			-			-
5.1.3. Complete DoD HazMat (NFPA) Operation Certification Course (hands-on Level A protection)		W						*		-	-			-			-
5.1.4. Roles and interactions in response operations (AFIMS)		W						A		B	-			-			C
5.1.4.1. Complete Air Force Emergency Management Course (AFEMC) Course # ZZ133131								-		-	-			-			-
5.1.4.2. Complete Air Force Emergency response Operations: First & Emergency Responders Course (AERO FERC) Course # ZZ133130								-		-	-			-			-
5.1.5. Mission specific competencies (crime scene & air monitoring)								-		-	-			-			-
5.1.5.1. Chemical hazards (industrial, WMD, etc.)								A		B	-			-			C
5.1.5.2. Radiological hazards (RDD, RED, FADED GIANT)								A		B	-			-			C
5.1.5.3. Biological hazards								A		B	-			-			C
5.2. Emergency response material and sources								-		-	-			-			C
5.2.1. Review of response publications and intelligence		W						A		B	-			-			C
5.2.2. Input and interpret	5	W						-		-	2b	Y		3c	Y		3c

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			A	B	C	D	E	A 3-Skill level		B 5-Skill Level				C 7-Skill level			D
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-1st CRS	DL	5-1st CDC	5-1st OJT	QTP	DL	7-1st OJT	QTP	DL	Advanced Tng CRS
risk assessment tools / dispersion models (i.e. CHEMRAT, CHART or equivalent)																	
5.2.3. Use emergency management response plans and checklists	5	W						-		-	2b	Y		-			3c
5.2.4. Develop emergency management response plans and checklists	7	W						-		-	-			3c	Y		3c
5.3. Shelter operations		W						A		B	-			-			-
5.4. Perform level A and B dressout (i.e. suits and SCBA)		W						2b		-	-			-			-
6. Nuclear Enterprise (NE) (DoD 3150.08-M "Nuclear Accident Response Procedures" (NARP), 22Aug 13; The Nuclear Matters Handbook Expanded Edition, 2011.																	
6.1. Role of BE in the NE								A		B	-			-			-
6.2. Theory and operation of Nuclear weapons								A		B	-			-			-
6.3. Fission and fusion of nuclear materials								A		B	-			-			-
6.4. Types of Nuclear weapons								A		A	-			-			-
6.5. Nuclear weapons incidents		W						-		A	-			-			B
6.5.1. Differentiating between NUDET, Broken Arrow, Faded Giant, Bent Spear, (include NORM)								A		B	-			-			B
6.5.2. Blast Hazards		W						A		A	-			-			B
6.5.3. Radiation hazards		W						A		A	-			-			B
6.5.4. Thermal Hazards		W						A		A	-			-			B
6.5.5. Secondary Hazards (weapon specific)		W						A		B	-			-			B
6.6. Common nuclear weapons isotopes		W						A		A	-			-			B
6.6.1. Radioactive half life		W						A		B	-			-			-
6.6.2. Biological half life		W						A		B	-			-			-
6.6.3. Effective half-life (establish relationships)		W						a		b	-			-			2b
6.7. Medical effects of nuclear detonation and accidental release		W						A		B	-			-			B
6.8. Medical countermeasures (Potassium Iodide, Prussian		W						A		B	-			-			B

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			A	B	C	D	E	A 3-Skill level		B 5-Skill Level				C 7-Skill level			D
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-IV CRS	DL	5-IV CDC	5-IV OJT	QTP	DL	7-IV OJT	QTP	DL	Advanced Tng CRS
Blue, Chelating Agents)																	
6.8.1. Recommend countermeasures	5,7	W						a		b	2b	Y		3c	Y		3c
6.9. Communicate protective/precautionary measures (coordinate w/ PA)								-		-	-			-			-
6.10. Units of radiation (dose / dose Rate / counts)		W						A		B	-			-			B
6.10.1. Convert units of radiation	5	W						2b		c	3c	Y		-			3c
6.11. Define radiation dose		W						A		A	-			-			-
6.12. Define radiation contamination		W						A		B	-			-			-
6.13. Calculate stay times	5	W						2b		c	3c	Y		-			3c
6.14. Measure nuclear radiation intensity and dose	5	W						-		-	3c	Y		-			-
6.15. Radiation detection equipment (theory of operation, capabilities, limitations for each)		W						A		B	-			-			-
6.15.1. Calibrate & operate ADM-300 kit (or equivalent)	5	W						1a		-	3c	Y		-			-
6.15.2. Calibrate & operate 451P (or equivalent)	5	W						1a		-	3c	Y		-			-
6.15.3. Calibrate & operate Radeco (or equivalent)	5	W						1a		-	3c	Y		-			-
6.15.4. Calibrate & operate SAM-940 (or equivalent)	5	W						1a		-	3c	Y		-			-
6.15.5. Operate EPD (or equivalent)	5	W						1a		-	3c	Y		-			-
6.15.5.1. Establish EPD Alarm levels	7	W						a		b	-			3c	Y		3c
6.16. Correct use, selection & limitations of PPE	5	W						B		C				-			-
6.17. Develop sampling analysis strategy (Air, water, soil, vegetation sampling strategies)	5,7	W						-		c	2b	Y		3c	Y		-
6.18. Determine contaminated food/water	5	W						-		C				-			-
6.19. Contamination control/management of contaminated equipment		W						-		B	-			-			-
6.20. Recommend decontamination procedures	5,7	W						-		b	2b	Y		3c	Y		c

1. Tasks, Knowledge, and Technical References	2. Core Tasks		3. Certification for OJT					4. Proficiency Codes Used To Indicate Required Training Level (refer to PC key)									
			A	B	C	D	E	A 3-Skill level		B 5-Skill Level			C 7-Skill level			D 5/7	
	Core	War	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	3-1st CRS	DL	5-1st CDC	5-1st OJT	QTP	DL	7-1st OJT	QTP	DL	Advanced Tng CRS
(personnel, equipment, vehicles, aircraft, buildings)																	
6.21. Recommend contamination control of contaminated patients/casualties		W						-		C	-			-			-
6.21.1. Recommend Control of contaminated remains		W						-		C	-			-			-
6.22. Perform Weapons Storage Area Surveys								-		b	-			-			-
6.23. Nuclear dispersion hazards (plots)		W						-		B	-			-			-
6.24. Overall health risk documentation								-		-	-			-			-
6.25. Evaluate personnel exposure / risk assessment	5	W						1a		b	2b	Y		-			3c
6.25.1. Document exposure in OEHS	5	W						1a		c	3c	Y		-			-
6.25.2. Document exposure in DOEHS (IR)	5	W						1a		c	3c	Y		-			-
6.26. Nuclear Intrinsic Radiation (INRAD) Safety and 91B Material Management								-		-	-			-			-

Part II, Section B - Course Objective Lists

4. Purpose. Knowledge of course objectives aids the supervisor in assessing graduates of apprentice level training; determining knowledge levels of graduates from advanced courses provided by the USAFSAM as well as aids in developing OJT materials.

5. Availability. The USAFSAM sponsors many different entry level, advanced courses and workshops. Information on individual courses, including course objectives, procedures, reporting instructions, and course listings and schedules, are found at the [Education and Training Course Announcement \(ETCA\) website](https://www.my.af.mil/etcacourses/) (<https://www.my.af.mil/etcacourses/>) accessed through the [Air Force Portal](#). For more specific questions on course material, contact the USAFSAM/OED Superintendent:

Address: USAFSAM/OED
Area B, Bldg 840
WPAFB, OH 45433-7913

Phone: DSN 798-3366

Part II, Section C - Support Materials

6. OJT Support Materials. Support materials enhance the base-level OJT Program and help standardize the program across the AF. As new BE OJT support materials are developed and released, notice is posted in the discussion portion of the AF BE Portal Group ‘4B0 / 43E / Civ - Bioenvironmental Engineering’. Message is automatically sent to total force BEs via group member’s registered email account. Relevant career field announcements and resources, may be viewed in the AF Bioenvironmental Engineering Functional Area in the AF Portal. To join the AF Portal Group ‘4B0 / 43E / Civ - Bioenvironmental Engineering’ ensure individual user profile is complete and up-to-date and request membership to this closed group in this location: <https://www.my.af.mil/gcss-af/USAF/group?groupId=g88B4F00B39C751FD013A1D10D7F600E9>

NOTE - Access the AF BE Functional Area location at this URL: <https://www.my.af.mil/gcss-af/USAF/ep/globalTab.do?channelPageId=s2D8EB9D6408E0AD001414B3FCEDF1549&command=function&parentCategoryId=s2D8EB9D6408E0AD001414B3FCEDF1549>

6.1. AFQTPs. Established to provide standardized OJT Program qualification and certification standards, 4B0X1 AFQTPs are mandatory for use during UGT and periodic certification due to PCS, new position qualification requirements, and periodic proficiency certifications outlined in Part I, Section C , paragraph 14. The AFQTPs are accessible in the AF e-Publications Site located in the AF Portal at <https://www.my.af.mil/gcss-af/USAF/ep/globalTab.do?channelPageId=s6925EC1356510FB5E044080020E329A9>

Part II, Section D - Training Course Index and Civilian Certifications

7. Training Course Index. Due to the broad and varied responsibilities of the career field, a variety of 4B0X1 relevant training courses are offered that support developmental education. Courses at the USAFSAM, AFIT School of Civil Engineering, AFIT Department of Engineering Physics, and several tri-service schools are available. The list of courses below for which 4B0X1 personnel may qualify is not all inclusive. Course titles that are asterisked (*) award the graduate a certification, manufacturer’s certification, or fulfill regulatory requirements to hold certain titles or positions.

7.1. USAFSAM COURSES

Course Number	Course Title	Location
B3ABY4B0310A1A	BE Apprentice	USAFSAM
B6OZW43EXA0A1A	Radiation Safety Officer* (RSO)	ADLS
B3OZY4XXX 0B1C	Contingency Preventive Medicine Course	USAFSAM
B3ACY4B071 0A1B	BE OHM (required for award of 4B071 skill level)	USAFSAM
B3XZYBERDS 0A1A	BE Readiness and Deployed Skills (BERDS)	USAFSAM
B3OZY43E1 0W1A	BE Advanced Workshop	USAFSAM
TBD	BE Nuclear Enterprise and Radiation (BENER)	USAFSAM
TBD	Environmental Health Measurements (EHM)	USAFSAM

7.2. AFIT – SCHOOL OF CIVIL ENGINEERING AND SERVICES COURSES

Course Number	Course Title	Location
WENV 220	Unit Environmental Coordinator (UEC) Course	WPAFB
WENV 222	Hazardous Material Management Program (HMMP)	WPAFB
WENV 531	Air Quality Management Course	WPAFB
WENV 541	Water Quality Management Course	WPAFB
WESS 542	Environmental Quality Sampling	WPAFB

7.3. AFIT – DEPARTMENT OF ENGINEERING PHYSICS

Course Number	Course Title	Location
N/A	Nuclear Weapons Effects, Policy, and Proliferation (NWEPP) Certificate Program	DL
N/A	Combating Weapons of Mass Destruction Certificate Program	DL
NOTES: Both courses are graduate level; personnel must possess at minimum a bachelor's degree to attend. For a description of these courses, visit http://www.afit.edu/ENP/ certificate programs.		

7.4. DEFENSE THREAT REDUCTION AGENCY (DTRA) – DNWS

Course Number	Course Title	Location
J5OZD13B402DA	Nuclear Weapons Incident Response Training (NWIRT), Basic	Kirtland AFB
J5OZD32E3G00DA	Nuclear Emergency Team Operations (NETOPS)	Kirtland AFB
JBOZD21A1A00DA	Nuclear Weapons Orientation	Kirtland AFB
NOTE: AFGSC attendees may be funded through AFMOA via an approved UFR submitted by HQ AFGSC. Otherwise, these courses are unit funded.		

7.5. DEFENSE SPECIAL WEAPONS AGENCY – ARMED FORCES RADIOBIOLOGY RESEARCH INSTITUTE (AFRRI)

Course Number	Course Title	Location
N/A	Medical Effects of Ionizing Radiation (MEIR)	Varies
N/A	MEIR Regional Short Course (formerly Medical Effects of Nuclear Weapons)	Varies
NOTE: These courses are part unit funded, part AF funded.		

7.6. U.S. ARMY MEDICAL RESEARCH INSTITUTE OF CHEMICAL DEFENSE

Course Number	Course Title	Location
5OZA44XX 00BA	Medical Management of Chemical-Biological Casualties (MMCBC)	Aberdeen PG, MD
NOTE: This course is unit funded.		

7.7. AFMS (MED+LEARN)

Course Number	Course Title	Location
09202013	*BE RSV Tool	DL
N/A	HAPSITE Smart Course	DL
N/A	RADeCO High Volume Air Sampling Kit Course	DL
N/A	Electronic Personal Dosimeter (EPD) Course	DL
N/A	Civil Defense Simultest (CDS) Kit Course	DL
N/A	SAM 940 Portable Nuclide Identifier	DL
NOTES: https://afms.csd.disa.mil/kc/main/kc_frame.asp?blnWhatsNew=True * This DL course is required for BE enlisted personnel returning from developmental special duty or from serving outside the FAC 5311 for 365 days or more (reference Part I, Section C – paragraph 14.).		

7.8. AF CIVIL ENGINEERING VIRTUAL LEARNING CENTER

Course Number	Course Title	Location
N/A	MultiRAE Plus Course	DL
N/A	HazMat ID Course	DL
N/A	HazMat Awareness Course	DL
NOTE: https://afcesa.csd.disa.mil/kc/main/kc_frame.asp?blnWhatsNew=True		

7.9. NAVAL CIVIL ENGINEER CORPS OFFICERS SCHOOL COURSES

Course Number	Course Title	Location
A-4A-0058	Basic Environmental Law	Varies
A-4A-0067	Environmental Negotiation Workshop	Varies
A-4A-0072	Health and Environmental Risk Communication Workshop	Varies
A-4A-0078	Human Health Risk Assessment	Varies

NOTE: <https://www.netc.navy.mil/centers/csfe/cecos/Default.aspx>

7.10. ARMY INSTITUTE OF PUBLIC HEALTH BLACKBOARD LEARN – ENVIRONMENTAL COURSES

Course Number	Course Title	Location
N/A	Direct Reading Gas & Vapor Instrumentation	DL
N/A	Environmental and Indoor Air Quality	DL
N/A	General Toxicology	DL
N/A	Pesticide Toxicology	DL
N/A	Public Affairs for the OSH Professional Communicating with the Media	DL
N/A	Radiation Math Concepts for Industrial Hygienists	DL

NOTE: https://aiph-dohs.ellc.learn.army.mil/webapps/portal/frameset.jsp?tab_tab_group_id=157_1

7.11. ARMY INSTITUTE OF PUBLIC HEALTH BLACKBOARD LEARN – INDUSTRIAL HYGIENE COURSES

Course Number	Course Title	Location
N/A	Industrial Ventilation	DL
N/A	Army Noise Measurement and Assessment	DL
N/A	Basic Epidemiology for the Industrial Hygienist	DL
N/A	Basic Industrial Hygiene Sampling	DL
N/A	Basic Noise Concepts and Math	DL
N/A	Applied Ergonomics	DL
N/A	Fundamentals of Ventilation	DL
N/A	GHS & HAZCOM Update	DL
N/A	IH & Exposure Assessment	DL
N/A	IH Management and Ethics	DL
N/A	IH Math and Chemistry Review	DL
N/A	Industrial Hygiene Noise Instrument Basics	DL
N/A	Industrial Hygiene Statistics	DL
N/A	Industrial Hygiene Survey and Sampling Etiquette	DL
N/A	Thermal Stressors	DL
N/A	Ventilation Fans	DL
N/A	Ventilation Hoods	DL
N/A	Ventilation HVAC Components and Controls	DL
N/A	Ventilation Protocols	DL
N/A	Work Environments Confined Spaces	DL

NOTE: https://aiph-dohs.ellc.learn.army.mil/webapps/portal/frameset.jsp?tab_tab_group_id=157_1

7.12. AIR UNIVERSITY ONLINE

Course Number	Course Title	Location
4702W_01	HAZMAT Operations Certification Course	DL

NOTE: https://au2.csd.disa.mil/kc/main/kc_frame.asp?bInWhatsNew=True

Frequency: This is a one-time training and certification requirement. However, to meet the intent of the Federal Regulation stated above, students are required to demonstrate competency or maintain proficiency at least annually. This refresher training requirement is conducted and tracked at the local level

7.13. Other Courses. The OSHA, the National Institute for Occupational Safety and Health (NIOSH), and the EPA offer a variety of courses relevant to the 4B0X1 specialty. These courses are often tuition free for government employees; however, travel and per diem expenses are not free. Funding for EPA courses may be available through AFIT. **NOTE:** Refer to [ETCA](#) for information on courses listed in this index. If unable to locate in ETCA, seek assistance from your supervisor, as not all courses are listed.

8. Civilian Certifications. Reference [Table 1](#) on page 29 of this CFETP for a complete list of BE approved certifying agencies, IAW AFI 41-104. A list of Corp specific certifying agencies is also available on the AFMS Knowledge Exchange Site at <https://kx2.afms.mil/kj/kx5/AFMedicalCorps/Pages/AFI-41-104-List-of-Certifying-Agencies.aspx>.

8.1. HAZMAT Operations Certification via Reciprocity. IAW paragraph 4.8 of DoDI 6055.06M, *DoD Fire and Emergency Services Certification Program*, the DoD certification program recognizes and accepts certification certificates from any entity accredited by the International Fire Service Accreditation Congress (IFSAC) or the Pro-Board. Individuals successfully completing the IFSAC or Pro-Board accredited training may request DoD equivalent certification under the reciprocity provision if the certificates submitted have the appropriate IFSAC or Pro-Board seal. You must receive a certificate with the IFSAC or Pro-Board seal and submit the request for credit under the reciprocity clause to the DoD Fire and Emergency Services (FES) Certification Program Administration Center. The DoD certification program does not issue certificates for non-accredited training (i.e. certificates without the appropriate seal will not be accepted).

Part II, Section E - MAJCOM Unique Requirements

9. AFGSC: Personnel attend the NETOPs at the DNWS, Kirtland AFB, NM as required by AFI 10-2501, AFGSC Supplement 1, Table 6.1.

10. AFMC: Primary UTC assigned AFRAT members attend a variety of position qualification training courses to provide rapid, global response to radiological and nuclear accidents and incidents. All personnel assigned to AFRAT must complete the *AFRAT Basic course and core METL training. Members assigned to specific AFRAT UTCs positions should attend the courses listed below as close to the start of duty position assignment, and use the developmental building block approach when rotating team members up to the next echelon of UTC position assignment to maximize return on investment during the controlled tour lengths. (DoD Manual 3150.08, *Nuclear Weapon Accident Response Procedures (NARP)*)
<http://www.dtic.mil/whs/directives/corres/pdf/315008m.pdf>

10.1. RAD/NUC Surveillance Team (RST)

Course Title	Location
*AFRAT Basic	USAFSAM
MEIR (SNCOs only)	AFRRI - USUHS
Applied Radiological Response Technology Level 2 (ARRT-2)	DNWS
Hazard Prediction and Assessment Capability Level 1 (HPAC-1)	DNWS
NETOPS	DNWS
Nuclear Weapons Incident Response Training (NWIRT)	DNWS
Weapons of Mass Destruction Command, Control, and coordination (WMDC3) (on-line)	DNWS
NOTES: No cost for AFRAT Basic. Other courses may be funded through the Readiness Training Oversight Committee (RTOC). Otherwise, unit must fund. *USAFSAM BENER advanced training course is projected to replace this basic course requirement.	

10.2. RAD/NUC Surveillance Augmentation Team (RSAT)

Course Title	Location
*AFRAT Basic	USAFSAM
Applied Radiological Response Technology Level 2 (AFFT-2)	DNWS
NETOPS	DNWS
NOTES: No cost for AFRAT Basic. Other courses may be funded through the RTOC. Otherwise, units must fund. *USAFSAM BENER advanced training course is projected to replace this basic course requirement.	

10.3. RAD/NUC Laboratory Team (RLT)

Course Title	Location
*AFRAT Basic	USAFSAM
Air Sampling for Radioactive Materials	Oak Ridge Associated Universities (ORAU), Oak Ridge, TN
Environmental Monitoring	ORAU
Gamma Spectroscopy	ORAU
NOTES: No cost for AFRAT Basic. Other courses may be funded through the RTOC. Otherwise, units must fund. *USAFSAM BENER advanced training course is projected to replace this basic course requirement.	

10.4. RAD/NUC Laboratory Augmentation Team (RLAT)

Course Title	Location
*AFRAT Basic	USAFSAM
Gamma Spectroscopy	ORAU
NOTES: No cost for AFRAT Basic. Other courses may be funded through the RTOC. Otherwise, units must fund. *USAFSAM BENER advanced training course is projected to replace this basic course requirement.	

10.5. RAD/NUC Dosimetry Team (RDT)

Course Title	Location
*AFRAT Basic	USAFSAM
MEIR (SNCOs only)	AFRRI - USUHS
NOTES: No cost for AFRAT Basic. Other courses may be funded through the RTOC. Otherwise, units must fund. *USAFSAM BENER advanced training course is projected to replace this basic course requirement.	

10.6. RAD/NUC Dosimetry Augmentation Team (RDAT)

Course Title	Location
*AFRAT Basic	USAFSAM
MEIR (SNCOs only)	AFRRI - USUHS
NOTE: No cost for AFRAT Basic. Other courses may be funded through the RTOC. Otherwise, units must fund. *USAFSAM BENER advanced training course is projected to replace this basic course requirement.	

Part II, Section F - Documentation of Training (AFMS-specific section)

11. Development of a Work Center Training Plan and Enlisted Training & Competency Folder.

11.1. Work Center Training Plan. The purpose of this section is to provide guidelines and examples of proper documentation for the many electronic forms used in training of all enlisted medical personnel. Training documentation helps to assess readiness capability, individual strengths and weaknesses. It also aids compliance with all Accreditation Association for Ambulatory Health Care, The Joint Commission, Commanders Inspection Program, and Unit Effectiveness Inspections requirements. The AFTR is accessible from the [ADLS](#) via the [AF Portal](#). Refer to your UTM for the current policies and guidance on training documentation.

11.1.1. MTP.

11.1.1.1. A MTP is a reference guide developed for each section that includes all facets of training for individuals assigned. It is used as a reference source for the type of training and training documentation that occurs with each assigned member. The MTP is used to standardize training and provide trainers, trainees, supervisors, and NCOICs an overview of the training process for the duty section. Training managers will incorporate the MTP into AFTR.

11.1.1.2. The MTP is an overview of training for the duty section, and should include all information involved in the training process for the duty section. Training will vary from section to section and person to person; however, certain documents will be a standard requirement for all MTPs. They are listed below:

11.1.1.3. Master Task List (MTL). The MTL identifies all day-to-day mission (duty position) requirements, core tasks, local and contingency tasks, and additional duties performed by work center personnel.

11.1.1.4. Current CFETP or AFJQS (if available).

11.1.2.3. Locally developed AF Form 797, *Job Qualification Standard Continuation/Command JQS*, which is now accessible in [AFTR](#).

11.1.1.5. Milestones for tasks and CDC completion (identify the projected time frame the trainee will complete their core tasks and each set of CDCs as required).

11.1.1.6. Unit-Specific Orientation Checklist.

11.1.1.7. Job descriptions and performance standards.

11.1.1.8. Required AFQTPs.

11.1.2. 4B0X1 MTP Templates. Established to provide a standardized 4B0X1 OJT program, qualification, and certification standards, 4B0X1 MTP templates have been developed by the USAFSAM/OED staff for 5 and 7-skill levels. The plans outline the minimum mandatory training requirements (i.e. core tasks) for 4B0X1 Airmen in UGT and will assist with development to progress and succeed in the 4B0X1 career field.

11.1.2.1. Divided into four (4) quarters, the 4B0X1 MTPs are based on the minimum 12-month OJT requirement. Because the cross-trainee minimum UGT is six months, the first and second quarters can be combined as can the third and fourth quarters (**NOTE:** The listed quarter requirements as shown in the MTPs are flexible based on topic).

11.1.2.2. The MTPs are mandatory for use during UGT and periodic certification and are accessible through the [BE Functional Area](#) of the AF Portal. A waiver must be submitted and approved by the 4B0X1 AFCFM for those flights unable to complete the MTP requirements (via your MFM).

11.2. AFTR Documentation.

11.2.1. AFTR serves as the single, automated repository for all medical EST. Consult the most current AFTR training message for detailed instructions regarding automated training documentation requirements.

11.2.2. Use the automated AFTR to document all training. **NOTE:** An AFJQS may be used in lieu of Part II of the CFETP only upon approval of the AFCFM. The AFCFM may supplement these minimum documentation procedures as needed or deemed necessary for the career field. Templates for BE specific training events are available for use via the [AF Portal BE functional area](#). Refer to your UTM for any additional policies and guidance on training documentation.

11.2.3. The USAFSAM will initiate AFTR records upon enrollment of all students into the BEA Course. Students and staff review and sign entries when required. Additionally, the USAFSAM uploads training progress documentation and upon graduation, forwards the AFTR record to the gaining base.

11.2.4. Transcribing a new or revised CFETP. The 4B0X1 AF CFM provides transcription instructions to the AFTR program manager and field users. This process is seamless to the field user as all existing trainee records are automatically and electronically transcribed.

11.2.5. Decertification and Recertification. IAW AFI 36-2201, when an Airman is found to be unqualified on a certified task, the supervisor shall delete the previous AFTR documented certification. Appropriate remarks are entered on the AF Form 623A, explaining the reason for decertification. The Airman is recertified using the normal certification process and AFTR is updated.

Abbreviations/Acronyms

A1C – Airman First Class
AAS – Associate of Applied Science
AB – Airman Basic or Air Base
ABET – Accreditation Board for Engineering and Technology
AD – Active Duty
ADL – Advanced Distributed Learning
AEF – Air and Space Expeditionary Force
AF – Air Force
AFCFM – Air Force Career Field Manager
AFCLC – Air Force Culture and Language Center
AF COOL – Air Force Credentialing Opportunities On-Line
AFDW – Air Force District of Washington
AFECD – Air Force Enlisted Classification Directory
AFI – Air Force Instruction
AFIT – Air Force Institute of Technology
AFMOA – Air Force Medical Operations Agency
AFMS – Air Force Medical Service
AFMSA – Air Force Medical Support Agency
AFOCD – Air Force Officer Classification Directory
AFOTEC – Air Force Operational Test & Evaluation Center
AFPC – Air Force Personnel Center
AFPD – Air Force Policy Directive
AFRAT – Air Force Radiation Assessment Team
A&FRC – Airman & Family Readiness Center
AFQTP – Air Force Qualification Training Package
AFRL – Air Force Research Laboratory
AFRRI – Armed Forces Radiobiology Research Institute
AFS – Air Force Specialty
AFSC – Air Force Specialty Code
AFTR – Air Force Training Record
AFVEC – Air Force Virtual Education Center
AIHA – American Industrial Hygiene Association

ALC – Air Logistics Center

AMDS – Aerospace Medicine Squadron

AME – Aerospace Medicine Enterprise

ANG – Air National Guard

AREC – Anticipate, Recognize, Evaluate, Control

AT/FP – Anti-Terrorism/Force Protection

AU – Air University

BE – Bioenvironmental Engineering (formal acronym for official documents)

BEA – Bioenvironmental Engineering Apprentice

BEAW – Bioenvironmental Engineering Advanced Workshop

BEE – Bioenvironmental Engineering (i.e. ‘branding’ the career field, its functions, people, logo and trademark)

BEF – Bioenvironmental Engineering Flight

BEO – Bioenvironmental Engineering Officer

BET – Bioenvironmental Engineering Technician (i.e. BE enlisted)

BMT – Basic Military Training

BSC – Biomedical Service Corp

CAA – Career Assistance Advisor

CAFSC – Control Air Force Specialty Code

C4ISR - Command, Control, Communications, Computer, Intelligence, Surveillance, and Reconnaissance

CBRN – Chemical, Biological, Radiological, Nuclear

CC – Commander

CCAF – Community College of the Air Force

CDC – Career Development Course

CE – Civil Engineering

CFETP – Career Field Education and Training Plan

CHEA – Council for Higher Education and Accreditation

CIP – Commander Involvement Program

CM – Consequence Management

CMSgt – Chief Master Sergeant

COL – Course Objectives List

CoL – Continuum of Learning

COTR – Contracting Officer’s Technical Representative

CPT – Career Path Tool

CSAF – Chief of Staff of the Air Force
CUWS – Center for Unconventional Weapons Studies
DAFSC – Duty Air Force Specialty Code
DE – Directed Energy or Developmental Education
DERG – Data Entry and Report Guide
DHHQ – Defense Health Headquarters
DL – Distance Learning
DoD – Department of Defense
DoDI – Department of Defense Instruction
DMRTI - Defense Medical Readiness Training Institute
DNWS – Defense Nuclear Weapons School
DOEHRS – Defense Occupational and Environmental Health Readiness System
DOTMLPF – Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities
DRI – Direct Reading Instrument
DSD – Developmental Special Duty
DTRA – Defense Threat Reduction Agency
DRU – Direct Reporting Unit
E2A – Enlisted-to-AFIT
EDT – Enlisted Developmental Team
EPA – Environmental Protection Agency
EPME – Enlisted Professional Military Education
EPRRC – Enlisted Promotion References and Requirements Catalog
EST – Enlisted Specialty Training
ETCA – Education & Training Course Announcement
FAC – Functional Account Code or Functional Advisory Committee
FES – Fire and Emergency Services
FHP&R – Force Health Protection & Readiness
FOA – Forward Operating Agency
FY – Fiscal Year
FYDP – Future Years Defense Program
GHS – Globally Harmonized System
GMV – Government Motor Vehicle
GRL – Global Reach Laydown

HADR – Humanitarian Assistance and Disaster Relief
HAF – Headquarters Air Force
HAZMAT – Hazardous Material
HLD – Homeland Defense
HRA – Health Risk Assessment
HSI – Human-Systems Interface or Health Services Inspection
HSMR – Home Station Medical Response
HST – Home Station Training
HTA – Health Threat Assessment
HYT – High Year Tenure
IAW – In Accordance With
IFSAC - International Fire Service Accreditation Congress
IHS – International Health Specialist
ILER – Individual Longitudinal Exposure Record
IMT – Information Management Tool
I-PAT – Individual Proficiency Analysis Test
ITP – Individual Transition Plan
INRAD – Intrinsic Radiation
ISR - Intelligence, Surveillance, and Reconnaissance
JB – Joint Base
JHRM – Joint Health Risk Management
JQS – Job Qualification Standard
KDP – Key Developmental Position
KLP – Key Leadership Position
KSA – Knowledge, Skills, Abilities
LAF – Line of the Air Force
LMR – Land Mobile Radio
MAJCOM – Major Command
MC-CBRN – Medical Counter-Chemical, Biological, Radiological and Nuclear
MDG – Medical Group
MERC – Medical Equipment Repair Center
MET – Mission Essential Task
MFM – MAJCOM Functional Manager
MHS – Military Health System

MIS – Management Information System
MNBC – Medical Nuclear, Biological, Chemical
MPS – Military Personnel Section
MRC – Medical Readiness Committee
MSC – Medical Service Corp
MSgt – Master Sergeant
MTF – Military Treatment Facility
MTL – Military Training Leader
NCO – Non-Commissioned Officer
NCOIC – Non-Commissioned Officer in Charge
NE – Nuclear Enterprise
NGO – Non-Governmental Organization
NIOSH – National Institute of Occupational Safety and Health
NRC – Nuclear Regulatory Commission
OAR – Occupational Analysis Report
OEH – Occupational & Environmental Health
OEH-MIS – Occupational & Environmental Health-Management Information System
OEHSA – Occupational & Environmental Health Site Assessment
OHM – Occupational Health Measurements
OHRM – Occupational Health Risk Management
OJT – On-the-Job Training
OMS – Occupational Measurement Squadron
OPORD – Operation Order
ORM – Operational Risk Management
OSHA – Occupational Safety and Health Administration
OSR – Occupational Survey Report
PACAF – Pacific Air Forces
PAFSC – Primary Air Force Specialty Code
PAM – Prevention and Aerospace Medicine
PAT – Proficiency Analytical Test
PCS – Permanent Change of Station
PD – Presidential Directive
PMEL – Precision Measurement Equipment Laboratory
POTUS – President of the United States

PPB&E – Planning, Programming, Budgeting, & Execution
QNFT – Quantitative Fit-Testing
RAC – Risk Assessment Code
READY – Resource Augmentation Duty
ROMO – Range of Military Operations
RP – Respiratory Protection
RSO – Radiation Safety Officer
RTOC – Readiness Training Oversight Committee
SACS – Southern Association of Colleges and Schools
SDI - Special Duty Identifier
SDS – Safety Data Sheet
SECAF – Secretary of the Air Force
SEL – Senior Enlisted Leader
SF – Security Forces
SG – Surgeon General
SG1 – Medical Force Development
SG3P – Aerospace Medicine Operations and Policy
SGN – Chief Nurse
SGP – Flight Surgeon
SKT – Specialty Knowledge Test
S.M.A.R.T. - Specific, Measureable, Achievable, Realistic, Time-bound
SME – Subject Matter Expert
SMSgt – Senior Master Sergeant
SOF – Special Operations Forces
SOFA – Status of Forces Agreement
SQ - Squadron
SrA – Senior Airman
SSgt – Staff Sergeant
STEM – Science, Technology, Engineering, Mathematics
STS – Specialty Training Standard
TA – Tuition Assistance
TAFMS – Total Active Federal Military Service
TCN – Third Country National
TDY – Temporary Duty

TIC/TIM – Toxic Industrial Chemical/Toxic Industrial Material
TIS – Time In Service
TLD – Thermo-Luminescent Dosimeter
T.O. – Technical Order
TR – Technical Reference
TRA – Training Requirements Analysis
TSgt – Technical Sergeant
UGT – Upgrade Training
ULN – Unit Line Number
UMD – Unit Manning Document
USAFE – United States Air Forces in Europe
USAFSAM – United States Air Force School of Aerospace Medicine
USUHS – Uniformed Services University of Health Sciences
UTC – Unit Type Code
UTM – Unit Training Manager
U&TW – Utilization & Training Workshop
VA – Vulnerability Assessment or Veterans Administration
WPAFB – Wright-Patterson Air Force Base

Terms Explained

Advanced Distributed Learning (ADL). An evolving, outcomes-focused approach to education, training, and performance aiding that blends standards-based distributed learning models emphasizing reusable content objects, content and learning management systems, performance support systems/devices, web applications services, and connectivity. ADL is an evolution of distributed learning (distance learning) that emphasizes collaboration on standards- based versions of reusable objects, networks, and learning management systems, yet may include some legacy methods and media. ADL is structured learning that takes place without requiring the physical presence of an instructor. Although the AF uses the term advanced distributed learning, some federal agencies and DoD components may use the term distance learning. These terms refer to the same basic concept. (AFI 36-2201, *Air Force Training Program*)

Advanced Distributed Learning Service (ADLS). ADLS is the system that delivers ADL content and tracks & reports student progress. (AFI 36-2201, *Air Force Training Program*)

Advanced Training (AT). Formal courses that provide individuals who are qualified in one or more positions of their AFS with additional skills and knowledge to enhance their expertise in the career field. Training is for selected career Airmen at the advanced level of the AFS. (AFI 36-2201, *Air Force Training Program*)

Air and Space Expeditionary Force (AEF). An organizational structure to provide forces and support on a rotational and thus relatively more predictable basis. They are composed of force packages of capabilities that provide rapid and responsive air and space power. (AFDD 1, *Air Force Doctrine Document 1-1* (2006))

Air and Space Expeditionary Task Force (AETF). The AF component in a joint force will organize as an AETF. An AETF has a Sof Air Force forces (COMAFFOR), a staff, appropriate command and control mechanisms, and tailored and fully supported forces to meet specific mission requirements. The AETF will be organized into a numbered expeditionary air force (NEAF), air expeditionary wings (AEW), air expeditionary groups (AEG), and air expeditionary squadrons (AES), or other organizations, as necessary to provide reasonable spans of control. When directly supporting a unified combatant command, the AETF is attached to the Air Force component. When an AETF is established to support a joint task force subordinate to a unified combatant command, the AETF may be attached for administrative control directly to the Air Force component to the unified combatant command, or it may be assigned to an AETF established at the unified combatant command level. (AFI 38-101, *Air Force Organization* (para. 8.6))

Air Force Career Field Manager (AFCFM). A representative appointed by the respective HQ USAF Deputy Chief of Staff or Under Secretariat, to ensure that assigned AF specialties are trained and utilized to support AF mission requirements. AFCFM is the OPR; however, works in concert with MAJCOM Functional Managers (MFMs) as required. (AFI 36-2201, *Air Force Training Program*)

Air Force Enlisted Classification Directory (AFECD). The official directory for all military enlisted classification descriptions, codes, and identifiers establishes the occupational structure of the Air Force enlisted force. The occupational structure is flexible to permit enlisted personnel to specialize and develop their skills and abilities while allowing the Air Force to meet changing mission requirements. Individual enlisted personnel have a joint responsibility with commanders and supervisors at all levels to fully develop their abilities consistent with Air Force needs and within the established patterns of specialization. (AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*; AFI 36-2640)

Air Force Job Qualification Standard (AFJQS). Training documents approved by the AFCFM for a particular job type or duty position within an AFS. (AFI 36-2201, *Air Force Training Program*)

Air Force Medical Service (AFMS) Flight Path. The Flight Path was designed to improve the platform for deliberately developing AFMS personnel and delivering health care at home station and deployed locations. It delineates the organizational structure in the AFMS. The Objective Medical Group implemented in 1993 provided for greater integration of operational and support functions with the LAF. A major focus of the AFMS Flight Path is the functional expertise and experience of leadership of the MTF: SGH, SGN, SGA, SGP, SGD, SGB, and the Group Superintendent. The military treatment facility will be organized around service-lines with squadrons delivering health care and support to beneficiaries. A clear chain of command exists for all personnel and the role of each squadron is clearly defined.

https://kx2.afms.mil/kj/kx5/FlightPath/Documents/Tab%201_2013%20Flight%20Path%20Special%20Instruction.pdf

Air Force Qualification Training Package (AFQTP). An instructional package designed for use at the unit to qualify, or aid qualification, in a duty position or program, or on a piece of equipment. It may be printed, computer-based, or in other audiovisual media. (AFI 36-2201, *Air Force Training Program*)

Air Force Specialty (AFS). A group of positions (with the same title and code) that require common qualifications. (AFI 36-2201, *Air Force Training Program*)

Air Force Tactics, Techniques and Procedures (AFTTP). AF technical training publication. (AFTTP(I) 3-2.37, *Multiservice Tactics, techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Consequence Management Operations*)

Attitude. (a) The emotions or feelings that influence a learner's desire or choice to perform a particular task. (b) A positive alteration in personal and professional beliefs, values, and feelings that will enable the learner to use skills and knowledge to implement positive change in the work environment. Also see **Knowledge** and **Skill**. (AFH 36-2235 v9, *Information for Designers of Instructional System Application to Technical Training*)

Air University Associate-to-Baccalaureate Cooperative (AU ABC). Allows Airmen to turn a Community College of the Air Force Associates Degree into a Bachelor's Degree from an accredited university. The ABC program has established a partnership with various civilian higher-education institutions to offer four-year degree opportunities via distance learning. The participating schools will accept all of the credits earned by Airmen who have attained a CCAF degree and apply them to a Bachelor's degree related to their Air Force specialty. (www.au.af.mil)

Behavior. Any activity, overt or covert, capable of being measured. (AFH 36-2235 v9, *Information for Designers of Instructional System Application to Technical Training*)

Biomedical Informatics (BMI). The interdisciplinary field that studies and pursues the effective uses of biomedical data, information, and knowledge for scientific inquiry, problem solving, and decision making, motivated by efforts to improve human health.

<http://www.amia.org/presentation/definition-biomedical-informatics>

Career Field Education and Training Plan (CFETP). A CFETP is a comprehensive core training document that identifies: life-cycle education and training requirements; training support resources, and minimum core task requirements for a specialty. The CFETP aims to give personnel a clear path and instill a sense of industry in career field training. (AFI 36-2201, *Air Force Training Program*)

Career Path Tool (CPT). The CPT is a dynamic, web-based career planning and force development tool for all Airmen (Officer, Enlisted, Guard and Reserve). It's also a mechanism for the Career Field Management (CFM) teams to communicate specific job information to their members by providing job descriptions, typical job duration estimates, and typical follow-on job recommendations from each of the job "buckets" defined on their members' pyramids. Through the combination of an Airman's specific duty history information and the CFM team-defined general recommendations, CPT provides Airmen the ability to fully develop a career plan.

Certification. A formal indication of an individual's ability to perform a task to required standards. (AFI 36-2201, *Air Force Training Program*)

Certifying Official. A person whom the commander assigns to determine an individual's ability to perform a task to required standards. (AFI 36-2201, *Air Force Training Program*)

Chemical, Biological, Radiological, Nuclear, and High-Yield Explosive (CBRNE) Task Qualification Training (TQT). CBRNE TQT ensures personnel maintain proficiency in performing mission-critical tasks in a CBRNE environment. (AFI 10-2501, *Air Force Emergency Management (EM) Program Planning and Operations* & AFMAN 10-2602, *Nuclear, Biological, Chemical and Conventional (NBCC) Defense Operations and Standards, for additional information/requirements.*)

Chief Enlisted Manager (CEM) Code. CEM codes identify all chief master sergeant positions in the Enlisted Classification Structure. They also identify chief master sergeants who, through extensive experience and training, have demonstrated managerial ability to plan, direct, coordinate, implement, and control a wide range of work activity. Some managerial duties and responsibilities that are common to all chief enlisted managers are: managing and directing personnel resource activities; interpreting and enforcing policy and applicable directives; establishing control procedures to meet work goals and standards; recommending or initiating actions to improve functional operation efficiency; planning and programming work commitments and schedules; developing plans regarding facilities, supplies, and equipment procurement and maintenance. (AFI 36-2101, *Classifying Military Personnel*)

Collaboration. Collaboration is the interaction among two or more individuals encompassing a variety of behaviors, including communication, information sharing, coordination, cooperation, problem-solving and negotiation.

Collaborative Tools. Collaborative tools consist of various web-based technologies including advanced white boarding, groupware, and facilitation. Collaborative capabilities assist significantly with managing information throughout its life cycle and enable Air Force members to perform most office-oriented and operational communication tasks from their desktops.

C4ISR. Integrated systems of doctrine, procedures, organizational structures, personnel, equipment, facilities, and communications designed to support a commander's exercise of command and control through all phases of the operational continuum. C4 systems include base visual information support systems. (reference Cyberspace Infrastructure Planning System (CIPS) definition below)

Computer Based Training (CBT). A forum for training in which the student learns via a computer terminal. It is an especially effective training tool that allows the students to practice applications while they learn. (AFMAN 36-2234, *Instructional System Development*)

Content Management. A set of processes and technologies supporting the evolutionary life cycle of digital information. This digital information is often referred to as content or, to be precise, digital content. Digital content may take the form of text, such as documents, multimedia files, such as audio or video files, or any other file type that follows a content life cycle that requires management. (AFPAM 33-363, *Management of Records*)

Continuum of Learning (CoL). The career-long process of individual development. It is designed to deliberately integrate developmental opportunities through a common taxonomy to produce adaptable, knowledge-enabled Airmen for today and tomorrow. (AFI 36-2640, *Executing Total Force Development*)

Continuation Training. Additional advanced training exceeding the minimum upgrade training requirements with emphasis on present or future duty assignments. (AFI 36-2201, *Air Force Training Program*)

Core Tasks. Tasks the AFCFM identify as minimum qualification requirements for everyone within an AFSC, regardless of duty position. Core tasks may be specified for a particular skill level or in general across the AFSC. Guidance for using core tasks can be found in the applicable CFETP narrative. (AFI 36-2201, *Air Force Training Program*)

Course Objective List (COL). A publication derived from initial and advanced skills CTS, identifying the tasks and knowledge requirements, and respective standards provided to achieve a 3-

or 7-skill level in this career field. Supervisors use the COL to assist in conducting graduate evaluations. (AFI 36-2201, *Air Force Training Program*)

Course Training Standard (CTS). A training standard that identifies the training members will receive in a specific course. (AFI 36-2201, *Air Force Training Program*)

Critical Tasks. Critical Tasks are tasks that require specific training and certification above and beyond other tasks. Tasks may be defined as critical either through AFI, Technical Orders, higher headquarters, or at any level in the unit.

Cross Utilization Training. Training on non-duty AFSC specific tasks that are interdependent team tasks .

Cyberspace. A global domain within the information environment consisting of the interdependent network of information technology infrastructures, including the Internet, telecommunications networks, computer systems, and embedded processors and controllers. (AFI 10-1701, *Command and Control (C2) For Cyberspace Operations*)

Cyberspace Infrastructure Planning System (CIPS) (formerly C4ISR). The approved automated information system for planning, installing, and managing the Air Force's cyberspace infrastructure. It is a web-enabled certified and secure enterprise government system. It was developed to meet Congressional, Department of Defense, and AF policy. It is a key enabler of network centric operations (NWO) and is a critical tool in support of the AF Global Information Grid (GIG) and AF Network Operations (AFNetOps). CIPS allows collaboration in documenting and tracking the installation of Information Technology on Air Force Installations. CIPS is a Command, Control, Communications, Computer, Intelligence, Surveillance, and Reconnaissance (C4ISR) program. (AFI 33-101, AFGM 2013-02, *Commanders Guidance and responsibilities.*)

Defense Occupational and Environmental Health Readiness System (DOEHRS). A Tri-Service, web-based Occupational and Environmental Health (OEH) exposure database system. DOEHRS is specifically designed to manage documentation of threats with completed pathways of exposure. The Industrial Hygiene (IH) module of DOEHRS is a key enabling technology within the presidentially mandated Force Health Protection Plan and is further supported by Public Law 105-85. DOEHRS-IH is a comprehensive, automated information system for assembling, comparing, using, evaluating, and storing environmental health surveillance data, occupational personnel exposure information, workplace environmental monitoring data, personal protective equipment usage data, observation of work practices data, and employee health hazard educational data. DOEHRS-IH provides information needed by Occupational Health (OH) staff and command surgeons for reporting options to commanders regarding the reduction of health threats. (DoDI 6055.05, *Occupational and Environmental Health (OEH)*, and DoDI 6490.03, *Deployment Health*)

Developmental Education (DE). An array of educational opportunities including: Professional Military Education, Advanced Academic Degree Education and Professional Continuing Education, AFPD 36-23, Military Education. (AFI 36-2301, *Developmental Education*)

Direct Reporting Unit (DRU). A subdivision of the AF, directly subordinate to the Chief of Staff, USAF. A DRU performs a mission that does not fit into any of the MAJCOMs. A DRU has many of the same administrative and organizational responsibilities as a MAJCOM. (AFI 38-101, *Air Force Organization (para 2.2.3.)*) (DRU example: the USAF Academy).

Document Management. The process of managing documents through their life cycle; from inception through creation, review, storage, dissemination, and archival or deletion. Document management can also be a database system to organize stored documents, or a search mechanism to quickly find specific documents. (AFPD 33-3, *Information Management*)

Duty Position Tasks. Tasks assigned to an individual for the position currently held. These include as a minimum all core tasks that correspond to the duty position as directed by the AFCFM or MFM, and tasks assigned by the supervisor. (AFI 36-2201, *Air Force Training Program*)

Education. The process of imparting general bodies of knowledge and habits of mind applicable to a broad spectrum of endeavors to intellectually prepare individuals to deal with dynamic environments and solve ill-defined problems by using critical thought and reasoned judgment. Education programs prepare Airmen to successfully anticipate and meet challenges across the range of military operations. (AFI 36-2640, *Executing Total Force Development*)

Education and Training Course Announcement (ETCA). Contains specific MAJCOM procedures, fund cite instructions, reporting instructions, and listings for those formal courses conducted or managed by the MAJCOMs or field operating agencies (FOAs). The ETCA contains courses conducted or administered by the AF and reserve forces and serves as a reference for the AF, DoD, other military services, government agencies, and security assistance programs. (AFI 36-2201, *Air Force Training Program*) *Located at <https://etca.randolph.af.mil>

Enterprise. The entire range of communications/networking within garrison and tactical realms to include voice, video, data, imagery and sensor. (DoDD 8500.01E, *Information Assurance (IA)*)

Enterprise Information System (EIS). A portfolio of services that bring about Enterprise Information Management (EIM) capabilities. (DoDD 8500.01E, *Information Assurance (IA)*)

Expeditionary Aerospace Force (EAF). The EAF concept is how the Air Force will organize, train, equip, and sustain itself by creating a mindset and cultural state that embraces the unique characteristics of aerospace power—range, speed, flexibility, and precision—to meet the national security challenges of the 21st Century. (AFI 10-244, *Reporting Status of Aerospace Expeditionary Forces*)

Experience. Active participation/involvement in positions, events or activities leading to the accumulation of knowledge or skill which can be utilized to meet mission requirements. (AFI 36-2640, *Executing Total Force Development*)

Exportable Training. Additional training via computer assisted, paper text, interactive video, or other necessary means to supplement training. (AFI 36-2201, *Air Force Training Program*)

Exposure Science. The science-based analysis of CBRN, OEH and ergonomic exposure to support the protection of human health and performance along with the determination of work-relatedness for injuries and illnesses. (<http://www.isesweb.org/About/about.htm>)

Exposure Informatics. The science-based collection, analysis, and long-term management of quality CBRN, OEH, and ergonomic exposure data, along with associated derivative information and knowledge, to support decision-making for continuous health threat assessment, health risk management and human performance enhancement, as well as service connected disability claims.

External Evaluation. Acquisition and analysis of data from outside the training environment to evaluate the training product in the operating environment. (AFI 36-2201, *Air Force Training Program*)

Field Operating Agency (FOA). A subdivision of the AF, directly subordinate to a Headquarters USAF functional manager. A FOA performs field activities beyond the scope of any of the MAJCOMs. The activities are specialized or associated with an AF-wide mission and do not include functions performed in management headquarters, unless specifically directed by a DoD authority. AF FOAs usually have the word Agency as part of their designation; Agency should not be used in the designation of any unit that is not a FOA directly under HQ USAF. (AFI 38-101, *Air Force Organization (para 2.2.4.)*) (FOA example: the Air Force Weather Agency)

Field Training. Technical, operator, and other training either a TD or a field training team conducts at operational locations on specific systems and associated direct-support equipment for maintenance and aircrew personnel. (AFI 36-2201, *Air Force Training Program*)

Full Spectrum Threat Response (FSTR). (a) A cross-functional program that integrates procedures and standards for planning, logistical requirements, emergency response actions, exercises and evaluation, training of personnel, detection, identification, and warning, notification, and enemy attack actions. It establishes responsibilities, procedures and standards for Air Force consequence management, which includes mitigation and emergency response to major accidents, natural disasters, WMD, and wartime passive defense actions. (AFMAN 10-2602, *Nuclear, Biological, Chemical, and Conventional (NBCC) Defense Operations and Standards & AFDD 10-25*) (b) Physical threats facing military installations including major accidents, natural disasters, HAZMAT, terrorist use of WMD, enemy attack and a broad spectrum of planning, response, and recovery actions. (AFI 10-2501, *Air Force Emergency Management (EM) Program Planning and Operations*)

Functional Area Manager (FAM). The individual accountable for the management and oversight of all personnel and equipment within a specific functional area to support the operational planning and execution. Responsibilities include, but are not limited to, developing and reviewing policy; developing, managing, and maintaining UTCs; developing criteria for and monitoring readiness reporting; force posturing; and analysis. At each level of responsibility (HAF, MAJCOM, Air Component, FOA, DRU, and Unit), the FAM should be the most highly knowledgeable and experienced person within the functional area and have the widest range of visibility over the functional area readiness and capability issues. (AFI 36-2201, *Air Force Training Program*)

Functional Manager (FM). Senior leaders, designated by the appropriate functional authorities, who provide day-to-day management responsibility over specific functional communities. While they should maintain an institutional focus with regard to resource development and distribution, FMs are responsible for ensuring their specialties are equipped, developed, and sustained to provide AF capabilities. (AFI 36-2640, *Executing Total Force Development*)

Global Command and Control System (GCCS). The GCCS is the DoD joint command and control system used to provide accurate, complete, and timely information for the operational chain of command. GCCS consists of the hardware, software, common procedures, standards, and interfaces that make up an “operational architecture” and provides worldwide connectivity with all levels of command. GCCS incorporates systems that provide situational awareness, support for intelligence, force planning, readiness assessment, and deployment applications that battlefield commanders require to effectively plan and execute joint military operations. (DoD IG, Report No. D-2003-078 *Global Command and Control System Joint Operation Planning and Execution System*)

Global Combat Support System – Air Force (GCSS-AF). An enterprise infrastructure program established to develop, integrate, and deploy combat support information capabilities. The mission of GCSS-AF is to provide timely, accurate, and trusted Agile Combat Support (ACS) information to Joint and Air Force commanders, their staffs, and ACS personnel at all ranks and echelons, with the appropriate level of security needed to execute the Air Force mission throughout the spectrum of military operations. GCSS-AF is the means by which ACS functional systems will be modernized and integrated to improve business processes supported on a single robust network-centric infrastructure. In addition to integrating combat support applications, GCSS-AF also provides core enterprise services such as a common user presentation through the AF Portal, Enterprise Information Management (Workflow, Records Management, Document Management, Knowledge Management, and Collaboration), and an enterprise data warehouse. (*Lockheed Martin Operations & Support Guide for Mission Applications*)

Go/No Go. The “Go” is the stage at which a trainee has gained enough skill, knowledge, and experience to perform the tasks without supervision. “No-Go” is the stage at which the trainee has not gained enough skill, knowledge, and experience to perform task without supervision. (AFI 36-2201, *Air Force Training Program*)

Globally Harmonized System (GHS). A system for standardizing and harmonizing the classification and labelling of chemicals. It is a logical and comprehensive approach to define health, physical and environmental hazards of chemicals, create classification processes that use available data on chemicals for comparison with the defined hazard criteria and communicate hazard information, as well as protective measures, on labels and Safety Data Sheets (SDS). (<https://www.osha.gov/dsg/hazcom/ghs.html#1.1>)

Human Factors (HF). HF is the science/discipline that applies information about human behavior, abilities, limitations and other characteristics to the design of systems for effective human use. (AFOTEC PAM 99-104, *AFOTEC Operational Suitability Test and Evaluation Guide*)

Individual Training Plan (ITP). Use Training Business Area (TBA) to document training. TBA reflects past and current qualifications, and is used to determine training requirements. It is intended to be a complete history of past training and current qualifications. Supervisors will ensure all documentation is accurate and comprehensive. (AFI 36-401, *Employee Training and Development*)

Informatics. Information science; the collection, classification, storage, retrieval, and dissemination of recorded knowledge. ([Merriam-Webster](#))

Information Management (IM). The planning, budgeting, manipulating, and controlling of information throughout its life cycle. (AFPD 33-3, *Information Management*)

Initial Skills Training. A formal school course that results in an AFSC 3-skill level award for enlisted or mandatory training for upgrade to qualified officers. (AFI 36-2201, *Air Force Training Program*)

Instructional System Development (ISD). A deliberate and orderly (but flexible) process for planning, developing, implementing, and managing instructional systems. It ensures that personnel are taught in a cost-efficient way the knowledge, skills, and attitudes essential for successful job performance. (AFMAN 36-2234, *Instructional System Development*)

Institutional Competency List (ICL). The common taxonomy used to implement the continuum of learning (CoL). These competencies are expected of all Airmen, throughout their careers, and will be the competencies needed to operate successfully in a constantly changing environment they function in. (AFI 36-2640, *Executing Total Force Development*)

Joint Health Risk Management (JHRM). Directly supports the Joint Function Concept (JFC) of Protection and casualty prevention in any operational environment by providing knowledge and decision support capabilities necessary to implement several key CONOPS, including *Joint CBRN Contamination Mitigation, Joint CBRN Hazard Awareness and Understanding, and Joint Force Health Protection* to mitigate the hazard and to conserve force strength. JHRM supports the goal of future U.S. Forces capability to survive and fight in CBRN Contaminated environments, making US targets less susceptible to CBRN agents and potentially catastrophic outcomes. (JROCM 106-13, *Joint Health Risk Management Initial Capabilities Document*)

Knowledge. a) Information from multiple domains that has been synthesized, through inference or deduction, into meaning or understanding that was not previously known. (AFPD 33-3, *Information Management*) b) Use of the mental processes that enable a person to recall facts, identify concepts, apply rules or principles, solve problems, and think creatively. Knowledge is not directly observable. A person manifests knowledge through performing associated overt activities. See also **Attitude** and **Skill**. (AFH 36-2235 v9, *Information for Designers of Instructional System Application to Technical Training*)

Knowledge Management (KM). The integration of people and processes, enabled by technology, to facilitate the exchange of operationally relevant information and expertise to increase organizational performance. (AFI 33-396, *Knowledge Management*)

Knowledge Operations (KO). Application and adaptation of Knowledge Management (KM) into daily AF operations to enable information/decision superiority. KO leverages the interaction of people, processes, and EIS technologies to capture, store, organize, share, and control tacit and explicit knowledge, ensuring all mission execution processes have access to relevant cross-functional information in a collaborative, timely, and contextual manner.

Knowledge Training. Training used to provide a base of knowledge for task performance. It may also be used in lieu of task performance when the training capability does not exist. Learning gained through knowledge rather than hands-on experience. (AFI 36-2201, *Air Force Training program*)

Life Science. A branch of science (as biology, medicine, and sometimes anthropology or sociology) that deals with living organisms and life processes (Merriam-Webster)

Individual Longitudinal Exposure Record (ILER): The continuing long-term record of pertinent data on CBRN, OEH and ergonomic exposures and events IAW Presidential Review Directive 5, *A National Obligation: Planning for Health Preparedness for and Readjustment of the Military, Veterans, and Their Families after Future Deployments*; the stated purpose is to "mine documented exposure information, ambient environmental monitoring data from theater, and self-reported exposures for use by DoD and VA, and report this information in your Electronic Health Record" http://forcereadiness.dhhq.health.mil/focusarea/exposures/about_focus_area.aspx

Major Command (MAJCOM). Usage of this term refers to all Major Commands (MAJCOM), Forward Operating Agencies (FOA), DRU, Air National Guard (ANG), and Air Force Reserve Command (AFRC) unless otherwise indicated. (AFI 36-2201, *Air Force Training Program*)

Master Task List (MTL). A comprehensive list (100%) of all tasks performed within a work center and consisting of the current CFETP or AFJQS and locally developed AF Forms 797 (as a minimum). Should include tasks required for deployment and/or UTC requirements. (AFI 36-2201, *Air Force Training Program*)

Master Training Plan (MTP). Employs a strategy for ensuring the completion of all work center job requirements by using a MTL and provides milestones for task, CDC completion, and prioritizes deployment/UTC, home station training (HST) tasks, upgrade, and qualification tasks. (AFI 36-2201, *Air Force Training Program*)

National Incident Management System (NIMS). System that provides a proactive approach guiding government agencies at all levels, the private sector, and non-governmental organizations (NGOs) to work seamlessly to prepare for, prevent, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life or property and harm to the environment. (DODI 6055.17)

Non-Traditional CBRN Sources. Exposures received by operational forces by sources such as environmental contamination, industrial operations, persons with contagious diseases, and other sources where conventional surveillance systems are not designed to detect. (JROCM 106-13, *Joint Health Risk Management Initial Capabilities Document*)

Non-Traditional Agent. A generic term for chemical or biochemical materiel that is not U.S. type-classified as a chemical agent but assessed to be in development by foreign threat elements and that could emerge as a threat agent. (Army Regulation 380-86, *Classification of Former Chemical Warfare, Chemical and Biological Defense, and Nuclear, Biological, and Chemical Contamination Survivability Information*)

Occupational Analysis (OA) Report. Collecting and analyzing factual data on the tasks and/or knowledge's performed by AF career fields. This data is used to provide personnel and training decision-makers with factual and objective job information which enables them to justify and/or change personnel utilization policies and programs, refine and maintain occupational structures, and establish, validate, and adjust testing and training programs. (AFI 36-2201, *Air Force Training Program*)

On-the-Job Training (OJT). Hands-on, “over-the-shoulder” conducted to certify personnel in both upgrade (skill level award) and job qualification (position certification training). (AFI 36-2201, *Air Force Training Program*)

Periodic Occupational & Environmental Monitoring Summaries (POEMS). The POEMS are the official DoD approved documents that summarize health risks and associated medical implications resulting from occupational and environmental health (OEH) exposures identified at deployment sites over a period of time. A standardized template for the POEMS for deployment sites has been created and concurred upon by the Joint Environmental Surveillance Work Group (JESWG). Specifically, POEMS describe the types of exposure hazards (e.g., airborne pollutants, water pollutants, infectious disease, noise, heat/cold), summarize site data/information collected, and provide an assessment of the significance of any known or potential short term (during deployment) and long-term (post deployment) health risks to the personnel population deployed to the site. In general, POEMS should reflect data and information collected from a year or more time at a site in order to adequately evaluate potential risks from long term exposures. The primary audience of the POEMS is military force health protection personnel and health care providers. To the extent that the available data allows, the POEMS describes the general ambient conditions at the deployment site and surrounding area, and characterizes the risks at the population-level. While useful to inform providers and others of potential health effects and associated medical implications, it does not represent an individual exposure profile. Actual individual exposures and specific resulting health effects depend on many variables and should be addressed in individual medical records by providers as appropriate at the time of an evaluation of a unique exposure. The intent of POEMS is to satisfy the need for such population-level health surveillance information to be available, should

service personnel have OEH exposure-related concerns. (CENTCOM Reg 40-2 & USAPHC Tech Guide 230)

Personally Identifiable Information (PII). A name, number, or symbol that is unique to an individual and can be used to trace an individual identity, usually the person's name or SSN; information about an individual that identifies, links, relates, or is unique to, or describes him or her, e.g., SSN; age; military rank; civilian grade; marital status; race; salary; home/office phone numbers; other demographic, biometric, personnel, medical, and financial information, etc. (i.e., information which can be used to distinguish or trace an individual's identity, such as their name, social security number, date of birth, place of birth, mother's maiden name, or biometric records, including any other PII which is linked or linkable to a specified individual). (AFI 33-332, *The Air Force Privacy and Civil Liberties Program*)

Physical Sciences. An area of science that deals with materials that are not alive and the ways in which non-living things work. (Merrian-Webster)

Position Qualification Training. Training designed to qualify an Airmen in a specific position that occurs after upgrade training. (AFI 36-2201, *Air Force Training Program*)

Process. A stand-alone manufacturing or service operation. (American Industrial Hygiene Association, <http://www.aiha.org/>)

Professional Judgment. The application and appropriate use of knowledge gained from formal education, experience, experimentation, inference, and analogy. The capacity of an experienced professional to draw correct inference from incomplete quantitative data, frequently on the basis of observations, analogy, and intuition. (American Industrial Hygiene Association, <http://www.aiha.org/>)

Proficiency Training. Additional training, either in-residence or exportable advanced training courses, or on-the-job training, provided to personnel to increase their skills and knowledge beyond the minimum required for upgrade. (AFI 36-2201, *Air Force Training Program*)

Qualification Training (QT). Hands-on performance training designed to qualify Airmen in a specific position. This training occurs both during and after upgrade training to maintain up-to-date qualifications. (AFI 36-2201, *Air Force Training Program*)

Range of Military Operations (ROMO). The range of military operations is another fundamental construct that provides context. Military operations vary in scope, purpose, and conflict intensity across a range that extends from military engagement, security cooperation, and deterrence activities to crisis response and limited contingency operations and, if necessary, to major operations and campaigns. (JP3-0, *Joint Operations*; AFI 10-244, *Reporting Status of Air and Space Expeditionary Force*)

Readiness Skills Verification Program (RSVP). Deployment related tasks and skills that individuals perform on a daily basis at home station. Tasks or skills already covered in formal UTC courses or as part of enlisted upgrade training unless UTC course or upgrade training frequency is not adequate to ensure or maintain proficiency. Determine RSVP task training frequency, considering the AEF deployment cycle, training platform constraints, and the duration of required skills or certifications. (AFI 41-106, *Medical Readiness*, para 2.1.10.1)

Records Management. Managerial activities involved with respect to records creation, records maintenance and use, and records disposition in order to achieve adequate and proper documentation of the policies and transactions of the Federal Government and effective and economical management of agency operations. (Federal Records Act), also called records administration. (AFI 33-360, *Publications and Forms Management* & AFMAN 33-363, *Management of Records*)

Resource Constraints. Resource deficiencies, such as money, facilities, time, manpower, and equipment that preclude desired training from being delivered. (AFI 36-2201, *Air Force Training Program*)

Retraining. Either formal school or on-the-job training (OJT) which qualifies an Airman for award of a new AFSC or AFSC shred out, to include lateral AFSCs. (AFI 36-2626, *Airman Retraining Program*)

Science, Technology, Engineering, and Mathematics (STEM). An interdisciplinary approach to learning where rigorous academic concepts are coupled with real-world lessons as students apply science, technology, engineering, and mathematics in contexts that make connections between school, community, work, and the global enterprise enabling the development of STEM literacy and with it the ability to compete in the new economy. (Tsupros, 2009)

<http://www.nsta.org/publications/news/story.aspx?id=59305>

Similar Exposure Group (SEG). Groups of workers having the same general exposure profile for the agent(s) being studied because of the similarity and frequency of the tasks they perform, the materials and processes with which they work, and the similarity of the way they perform the tasks. (American Industrial Hygiene Association, www.aiha.org)

STEM Degreed: The total assigned military/civilian personnel with a qualifying STEM degree at the undergraduate/graduate level to include those who are not presently serving in a technical degree required position. (*Bright Horizons, the AF STEM Workforce Strategy*, signed by SecAF/CSAF March 2011)

STEM Workforce: The total assigned military/civilian personnel with a qualifying STEM degree at the undergraduate/graduate level and are presently serving in a technical degree required position.

NOTE: We typically find STEM assigned Airmen in organizations that perform analysis, research, test, sustainment, program management to include nuclear, cyber, or space related missions. STEM assigned Airman are also found in higher headquarters, the Reserves, and Air Force support functions. (*Bright Horizons, the AF STEM Workforce Strategy*, signed by SecAF/CSAF March 2011)

Seasoning Days. This training provides unit or equipment-specific training not taught at formal training locations. Seasoning is generally defined as training accomplished at home station. Prior service and non-prior service (NPS) personnel are authorized seasoning as shown in the annual authorized seasoning list from National Guard Bureau (NGB)/A1Y. Seasoning days listed on the authorized list are the maximum allowed and if members are certified or trained before using the maximum days listed then they should be removed from seasoning days. (For the most up to date information regarding seasoning days and their use see the annual workday guidance and seasoning day guidance issued by NGB/A1Y; military technicians and Active Guard and Reserve (AGR) Duty are not authorized seasoning days). (ANGI 36-2001, *Management of Training and Operational Support within the Air National Guard*)

Skill Level. The level of qualification within an awarded enlisted AFS, shown by the fourth digit of the AFSC. The 1-skill level (helper) identifies personnel initially classified in an AFS when entering the AF or when retraining. The 3-skill level (apprentice) identifies enlisted personnel who have obtained basic knowledge within an AFSC through completion of an initial skills course. The 5-skill

level identifies enlisted personnel who, through experience and training, have demonstrated skilled proficiency in their AFSC. The 7-skill level (craftsman) identifies enlisted personnel who have gained a high degree of technical knowledge in their AFSC and who have additionally acquired supervisory capability through training and experience. The 9-skill level (superintendent) identifies enlisted personnel who, through experience, training, and performance, have shown a high degree of managerial and supervisory ability to fill positions requiring broad general (and sometimes technical) knowledge. (AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*)

Specialty Training. The total training process used to qualify airmen in their assigned specialty. (AFI 36-2201, *Air Force Training Program*)

Specialty Training Requirements Team. A meeting chaired by the AFCFM with MAJCOM FMs, USAFSAM Training Managers, Subject Matter Experts (SME) and HQ AETC Occupational Analysis Division (OAD) in attendance. Typically held three months prior to a Utilization and Training Workshop (U&TW) to finalize any CFETP changes or enlisted classification directory descriptions. (AFI 36-2201, *Air Force Training Program*)

Specialty Training Standard (STS). An AF publication that describes an AFS in terms of tasks and knowledge an Airman in that specialty may be expected to perform or to know on the job. Also identifies the training provided to achieve a 3-, 5-, 7-skill level within an enlisted AFS. It further serves as a contract between AETC (USAFSAM for 4Bs) and the functional user to show which of the overall training requirements for an AFSC are taught in formal schools and correspondence courses. (AFI 36-2201, *Air Force Training Program*)

Special Duty Identifier (SDI). A four- or five-digit code and title used to identify manpower positions and persons performing duties not clearly within a specific career field. Has a complete specialty description. Examples: 83RO Recruiting Service (Officer), 8P000 Courier (Enlisted). (AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*)

Special Experience Identifier (SEI). A three-character code that identifies special experience and training not otherwise identified in the personnel data system. SEIs may permit rapid identification of individuals already experienced to meet assignment requirements. More importantly, they provide a means for identifying critical manning requirements during wartime or contingency operations when little lead time is available for training personnel in specific technical skills needed to support a weapon system or mission. SEIs are not substitutes for AFSCs, suffixes, prefixes, special duty identifiers, reporting identifiers, CEM codes, or professional specialty course codes. The AFOCD and AFECD list approved SEIs. (AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*)

Standard. An exact value, a physical entity, or an abstract concept, the appropriate authority, custom, or common consent sets up and defines to serve as a reference, model, or rule in measuring quantities or qualities, developing practices or procedures, or evaluating results. A fixed quantity or quality. (AFI 36-2201, *Air Force Training Program*)

Subject Matter Expert (SME). (a) An individual who has thorough knowledge of a job, duties/tasks, or a particular topic, which qualifies him/her to assist in the training development process (for example, to consult, review, analyze, advise, or critique). (b) A person who has high-level knowledge and skill in the performance of a job. (AFH 36-2235 v9, *Information for Designers of Instructional System Application to Technical Training*)

System Training Plan (STP). A living document that explains what training is needed for a system and how to obtain the training. (AFI 36-2251, *Management of Air Force Training Systems*)

Task. A work element or a series of work elements. (American Industrial Hygiene Association, www.aiha.org)

Task Certifier. See Certification Official. (AFI 36-2201, *Air Force Training Program*)

Task Module (TM). A group of tasks performed together within an AFS that require common knowledge, skills, and abilities. TMs are identified by an identification code and a statement. (AFMAN 36-2234, *Instructional System Development*)

Total Exposure Health (TEH). A strategy integrating occupational health, lifestyle health (health promotions), Environmental Health, and Hobby Health to support total health by preventing illness and advancing health and well-being. TEH incorporates all "exposure" aspects of National Institute for Occupational Safety and Health (NIOSH) Total Worker Health (TWH) and National Institute of Health (NIH) Total Community Health. (<http://www.cdc.gov/niosh/TWH/>)

Total Force. All collective AF components (active, reserve, guard, and civilian elements) of the United States Air Force. (AFI 36-2201, *Air Force Training Program*)

Trainer. A trained and qualified person who teaches personnel to perform specific tasks through OJT methods. Also, equipment that the trainer uses to teach personnel specified tasks. (AFI 36-2201, *Air Force Training Program*)

Training. A set of events or activities presented in a structured or planned manner through one or more media for the attainment and retention of skills, knowledge and attitudes required to meet job performance requirements. This involves the coaching and mentoring of Airmen, resulting in proficiency development. (AFI 36-2640, *Executing Total Force Development*)

Training Capability. The ability of a unit or base to provide training. Authorities consider the availability of equipment, qualified trainers, and study reference materials, and so on in determining a unit's training capability. (AFI 36-2201, *Air Force Training Program*)

Training Detachment (TD). An AETC detachment that provides technical training, at an operational location, on specific systems, and their aerospace ground equipment. A TD aims to: Qualify personnel on new equipment or in new techniques and procedures, maintain proficiency and to increase skill and knowledge, acquaint personnel with specific systems, and keep personnel aware of changing concepts and requirements. (AFI 36-2201, *Air Force Training Program*)

Training Planning Team (TPT). Comprised of the same personnel as a U&TW, TPTs are more intimately involved in training development and the range of issues examined is greater than in the U&TW forum. (AFMAN 36-2234, *Instructional System Development*)

Training Requirements Analysis (TRA). A detailed analysis of tasks for a particular AFSC to be included in the training decision process. (AFI 36-2251, *Management of Air Force Training Systems*)

Training Setting. The type of forum in which training is provided (formal resident school, on-the-job, field training, mobile training team, self-study, etc). (AFI 36-2201, *Air Force Training Program*)

Unit Type Code (UTC). A five-character alphanumeric code identifying a specific force package of personnel and/or equipment. The UTC is the means for linking logistics and manpower details within a unit type and is used to communicate force data. The UTC represents a wartime capability designed to fill a valid contingency requirement. (AFI 10-401, *Air Force Operations Planning and Execution*)

Upgrade Training (UGT). Mandatory training that leads to attainment of a higher level of proficiency. (AFI 36-2201, *Air Force Training Program*)

Utilization and Training Pattern. A depiction of the training provided to, and the jobs performed by, personnel throughout their tenure within a career field or Air Force specialty. There are two types of patterns: 1) Current pattern, which is based on the training provided to incumbents and the jobs to which they have been and are assigned; and 2) Alternate pattern, which considers proposed changes in manpower, personnel, and training policies.

Utilization and Training Workshop (U&TW). A forum of AFSC MAJCOM Functional Managers (MFMs), Subject Matter Experts (SMEs), and AETC (USAFSAM for 4B0X1 AFS) training personnel that determines career ladder training requirements. (AFI 36-2201, *Air Force Training Program* & AFI 36-2251 *Management of Air Force Training Systems*)

Value Index. A measurement/indexing of the value in work processes, tasks, or subtasks as a function of both the closeness to the centerline of a mapped value stream and the number of value streams and product lines supported; i.e., a measurement/indexing of the contribution of work processes, tasks, or subtasks to the timely and efficient delivery of one of more defined product lines.

Value Stream. A lean management term; the most efficient path from corporate management to the defined product lines; every work process, task, or subtask that doesn't lie within a value stream is considered waste and should be eliminated; and, many value streams passing through a specific work process, task, or subtask is an indication of the value.

Wartime Tasks. Those tasks that must be taught when courses are accelerated in a wartime environment. In response to a wartime scenario, these tasks will be taught in the 3 level course in a streamlined training environment. These tasks are only for those career fields that still need them applied to their schoolhouse tasks. (AFI 36-2201, *Air Force Training Program*)